Ontario Energy Board | Commission de l'énergie de l'Ontario

DECISION AND ORDER

EB-2022-0157

ENBRIDGE GAS INC.

Application for leave to construct natural gas pipeline and associated facilities in the Municipality of Chatham Kent and Municipality of Lakeshore

BEFORE: Patrick Moran
Presiding Commissioner

David Sword
Commissioner

Robert Dodds
Commissioner

May 14, 2024

Ontario Energy Board | Commission de l'énergie de l'Ontario

TABLE OF CONTENTS

1 OVERVIEW

On June 10, 2022, Enbridge Gas Inc. (Enbridge Gas) filed an application with the Ontario Energy Board (OEB) under section 90(1) of the *Ontario Energy Board Act, 1998* (OEB Act), for an order granting leave to construct approximately 19 km 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[1]) (Project) and approximately 12 km of natural gas pipeline in the Municipality of Lakeshore, Town of Kingsville and the Municipality of Leamington (Leamington Interconnect).

Enbridge Gas also applied under section 97 of the OEB Act, for approval of the forms of agreement it offers to landowners to use their land for routing or construction of the proposed pipeline.

On June 16, 2023, Enbridge Gas filed an amended application. In the amended application, Enbridge Gas removed the Leamington Interconnect, updated the Project demand forecast, Project construction and in-service schedules, the costs and economics and the other evidence affected by the changes in the Project's scope, schedule and costs.

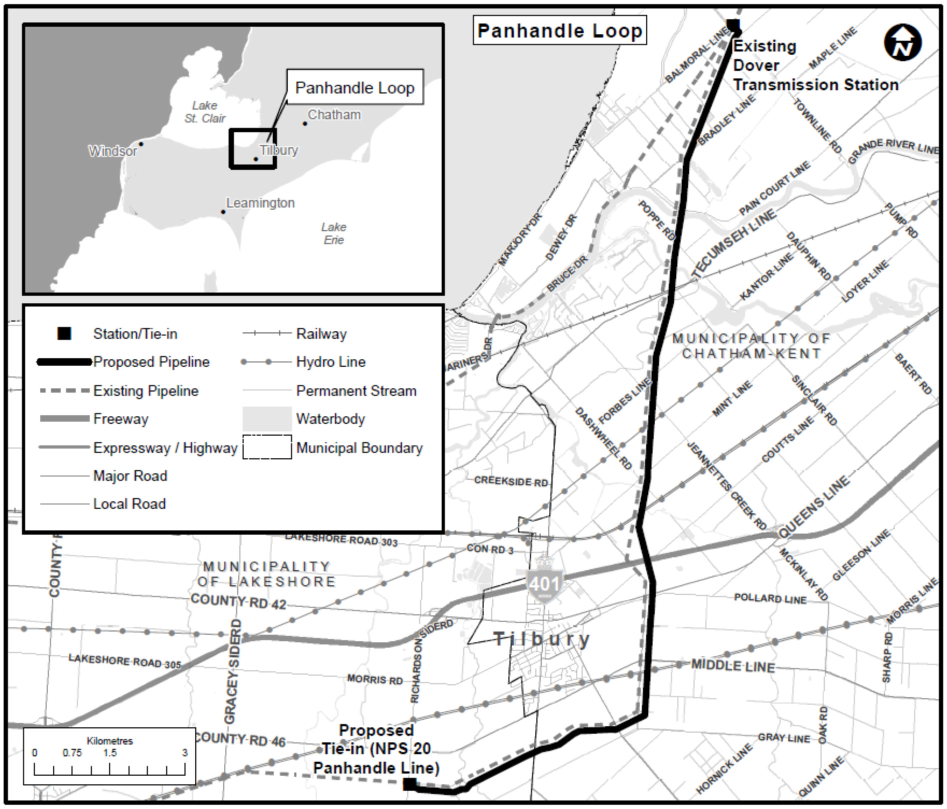
According to Enbridge Gas, the Project is needed in response to increasing natural gas demand growth in the areas served by the Panhandle system. Specifically, Enbridge Gas is forecasting continued demand growth from commercial, industrial, and residential customers.

Enbridge Gas proposed to start construction in April 2024, with an in-service date of November 2024.

[1] Term "loop" is a common industry term used to mean paralleling an existing pipeline

The general location of the Project is shown on the map below.

Figure 1
Project Location



The Panhandle system is comprised of transmission pipelines to transport natural gas between Enbridge Gas's Dawn Compressor Station, located in the Township of Dawn-Euphemia and the Ojibway Valve Site, located in the City of Windsor.[2] The Panhandle system feeds distribution systems serving residential, commercial, and industrial markets in the municipalities of Dawn- Euphemia, St. Clair, Chatham-Kent, Windsor, Lakeshore, Leamington, Kingsville, Essex, Amherstburg, LaSalle, and Tecumseh.[3]

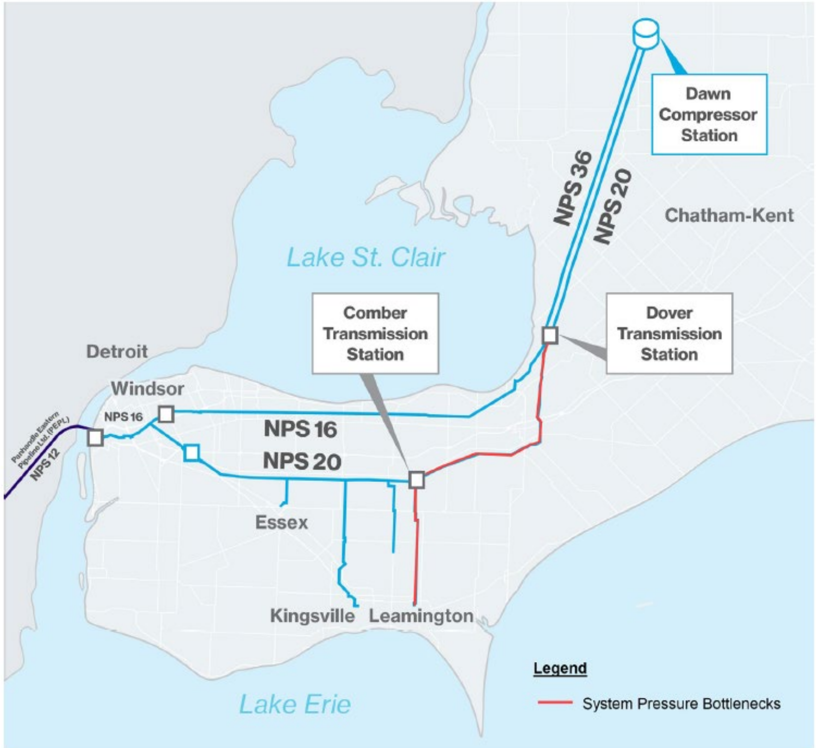
According to Enbridge Gas, there are currently two major pressure bottlenecks along the Panhandle system: (1) the NPS 20 Line between the Dover Transmission Station

[2] Exhibit A, Tab 3, Schedule 1, page 1, paragraph 2, June 16, 2023
[3] Ibid.

and the Comber Transmission Station; and (2) the pressure loss between the NPS 20 Line and the Leamington-Kingsville market.[4]

Figure 2 below illustrates the Panhandle system and the pressure bottlenecks.[5]

Figure 2
Panhandle System Pressure Bottlenecks



[4] Exhibit B, Tab 2, Schedule 1, page 13, paragraph 31, June 16, 2023
[5] Exhibit B, Tab 2, Schedule 1, page 14, Figure 4, June 16, 2023

1.1 Approvals Granted

The OEB finds that leave to construct the Project is in the public interest after considering the issues of need, alternatives, project costs, project economics, environmental matters, landowner matters, and indigenous consultation. The OEB therefore grants leave to construct the Project, subject to the OEB's standard conditions of approval appended as Schedule A to this Decision and Order.

The OEB also approves the forms of agreement for permanent easement and temporary land use proposed by Enbridge Gas, pursuant to section 97 of the OEB Act.

1.2 Key Decisions

The OEB's key decisions are set out below:

- Enbridge Gas has demonstrated the need for the Project.
- The Project is the best alternative to meet the forecasted demand growth on the Panhandle system.
- By majority (Commissioners Dodds and Sword), given the steps that Enbridge Gas is already taking in this regard, it is not necessary for the OEB to direct Enbridge Gas to assess whether it recommends a proactive Integrated Resource Plan (IRP) plan for potential future phases of the Panhandle system expansion or to mandate that Enbridge Gas proactively engage contract customers to identify potential energy efficiency opportunities.
- The estimated capital cost of $358 million for the Project is reasonable.
- The Project is a transmission system and the three-stage E.B.O. 134 test applies.
- By majority (Commissioners Dodds and Sword), the Project is economically justified with no requirement for contributions in aid of construction (CIAC).
- Enbridge Gas has completed the Environmental Report in accordance with the OEB's *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Projects and Facilities in Ontario* (Environmental Guidelines).
- Enbridge Gas has appropriately managed land-related matters. The forms of agreement for permanent easement and temporary land use proposed by

Enbridge Gas are consistent with those that have been previously approved by the OEB.

- The duty to consult has been discharged sufficiently to allow leave to construct the Project. The OEB is satisfied that Enbridge Gas has followed the OEB's Environmental Guidelines and has conducted a meaningful consultation with Indigenous communities. This finding is supported by the Ministry of Energy's Letter of Opinion.
- By majority (Commissioners Dodds and Sword), no additional conditions of approval are needed beyond those set out in the OEB's standard conditions of approval.

2 THE PROCEEDING

The OEB issued the Notice of Hearing on July 4, 2022. The following parties applied for and were granted intervenor status:

- Association of Power Producers of Ontario (APPrO)
- Atura Power
- Middle Road Farms Limited and Courey Corporation (Courey Corporation) (Joint intervention)
- Environmental Defence
- Energy Probe
- Federation of Rental-housing Providers of Ontario (FRPO)
- Industrial Gas Users Association (IGUA)
- Ontario Greenhouse Vegetable Growers (OGVG)
- Pollution Probe
- Three Fires Group
- School Energy Coalition (SEC)[6]
- Kitchener Utilities[7]

APPrO, Environmental Defence, Energy Probe, FRPO, IGUA, OGVG, Pollution Probe, SEC and Three Fires Group were also found to be eligible to apply for an award of costs.

On August 12, 2022, the OEB issued Procedural Order No. 1 setting the schedule for interrogatories and a transcribed technical conference. The OEB also set a timeline for any intervenor seeking to file evidence to file a description of the proposed evidence and estimated cost of preparing the evidence. Environmental Defence and Courey Corporation responded by filing information on September 27, 2022.

Environmental Defence proposed to retain Dr. McDiarmid to review Enbridge Gas's Stage 2 analysis under E.B.O. 134[8] and provide an analysis of the net savings or net costs of customers using natural gas in comparison to alternatives, such as high

[6] Late intervenor status granted on August 17, 2023
[7] *Ibid.*
[8] E.B.O. 134 Report of the Board: Review by the OEB of the Expansion of the Natural Gas System in Ontario, June 1, 1987, Amended on February 21, 2013, by Filing Guidelines on the Economic Tests for Transmission Pipeline Applications (EB-2012-0092)

efficiency electric heat pumps, focusing on residential customers, as well as high-level comments on electric heat pumps as an energy option for greenhouses.

Courey Corporation indicated that it planned to provide evidence on the need to extend the proposed Panhandle Loop west to terminate the pipeline on the properties of Courey Corporation and Middle Road Farms Limited. Courey Corporation also noted that Mr. Thibodeau may provide evidence and that a soil scientist may be required.

On September 27, 2022, Courey Corporation also clarified that it also represents Mr. Girard Thibodeau, a directly impacted landowner. On October 11, 2022, the OEB granted Mr. Girard Thibodeau intervenor status. The OEB also granted Courey Corporation, Middle Road Farms Limited, and Mr. Girard Thibodeau eligibility to apply for an award of costs.

Pollution Probe and Enbridge Gas responded to the intervenor evidence proposals on September 29, 2022. Pollution Probe supported Environmental Defence's proposed evidence. Enbridge Gas stated that it is not able to comment on the relevance of the proposed evidence and requested that if the OEB allows the proposed evidence, it also allows for the discovery and for Enbridge Gas to file reply evidence.

On October 3, 2022 and October 11, 2022, the OEB requested further clarification and information on the evidence proposed by Environmental Defence and Courey Corporation, respectively. Environmental Defence responded to the OEB's questions on October 4, 2022. Enbridge Gas objected to Environmental Defence's proposed evidence on October 5, 2022. Courey Corporation did not respond to the OEB's request.

The OEB held a two-day transcribed technical conference from October 6-7, 2022.

On October 14, 2022, the OEB issued Procedural Order No. 2, granting Environmental Defence and Courey Corporation's requests to file evidence and Enbridge Gas's request to file reply evidence. The OEB also granted Enbridge Gas's extension request to file written responses to undertakings on October 19, 2022 (from October 14, 2022).

Procedural Order No. 2 also set the schedule for intervenor evidence, Enbridge Gas's reply evidence, discovery on the intervenor and reply evidence, Enbridge Gas's argument-in-chief, OEB staff and intervenor written submissions and Enbridge Gas's reply submission.

On October 19, 2022, Enbridge Gas filed written responses to undertakings from the technical conference.

On October 28, 2022, Environmental Defence filed its evidence. Courey Corporation did not file evidence.

On November 1, 2022, Three Fires Group filed a letter requesting that Enbridge Gas respond to supplementary questions arising out of Enbridge Gas's undertaking responses. On November 4, 2022, Enbridge Gas submitted that it had provided sufficient information through the interrogatory process, the technical conference and the undertaking responses.

On November 2, 2022, Enbridge Gas requested a further extension to the procedural timeline set out in Procedural Order No. 2.

On November 10, 2022, the OEB issued Procedural Order No. 3, accepting Enbridge Gas's extension request and revised the schedule for the remainder of the proceeding. The OEB also ordered that Enbridge Gas file responses to the supplementary questions from Three Fires Group and set a date for these responses.

Written discovery on Environmental Defence's evidence and on Enbridge Gas's reply evidence was completed on November 28, 2022. Enbridge Gas's responses to supplementary questions by Three Fires Group were also filed on November 28, 2022.

On December 5, 2022, Enbridge Gas filed a letter advising the OEB that, due to unexpected circumstances, it was not in a position to file its argument-in-chief and requested that the OEB place the application in abeyance until updates to the evidence are available. Enbridge Gas stated that it received new cost information that may materially increase the estimated cost of the Project and therefore additional time is needed to update or amend the evidence.

Environmental Defence, FRPO and IGUA filed letters with the OEB raising concerns about the economics of the Project and whether CIAC payments from customers should be required. Pollution Probe filed a letter with the OEB raising a concern on whether customers should be notified.

On December 14, 2022, the OEB issued Procedural Order No. 4, placing Enbridge Gas's application in abeyance as of December 5, 2022 and ordered Enbridge Gas to confirm the date it expects to file an amended application by February 1, 2023. Procedural Order No. 4, also directed that Enbridge Gas address the applicability of

E.B.O. 134 and E.B.O. 188[9] in its amended application, and the extent to which CIAC payments should be required. The OEB also noted that Enbridge Gas may wish to consider whether it should communicate with potentially affected customers regarding the position of some parties that CIAC payments should be required.

On February 1, 2023, Enbridge Gas filed a letter informing the OEB that, based on actual 2022 attachments and on updated information on 2023 customer demand, the in-service date for the Project can be deferred to November 1, 2024. Enbridge Gas submitted that it expected to file evidence amendments no later than August 2023 and asked that the OEB continue to hold the application in abeyance until that time.

On February 7, 2023, the OEB issued Procedural Order No. 5, ordering that the application remain in abeyance and ordered Enbridge Gas to confirm the date it expects to file an amended application by July 31, 2023. Procedural Order No. 5 also set out a process for interim cost awards. On March 29, 2023, the OEB issued Decision and Order on Interim Cost Awards.

On June 16, 2023, Enbridge Gas filed its amended application which removed the Leamington Interconnect, and updated the project demand forecast, project construction and in-service schedules, the costs and economics and the other evidence affected by the changes in the project's scope, schedule and costs.

On July 28, 2023, the OEB issued an Amended Notice of Application and Procedural Order No. 6 which resumed processing the application and established a timeline for written interrogatories, a virtual technical conference, Enbridge Gas's argument-in-chief, written submissions by parties and a reply submission by Enbridge Gas.

On August 2, 2023 and August 15, 2023, SEC and Kitchener Utilities requested, and were granted, intervenor status. The OEB also granted SEC cost award eligibility.

On August 25, 2023, the OEB issued a letter proposing an oral hearing, following the written discovery process, in place of the technical conference scheduled in Procedural Order No. 6 and proposed the scope for an oral hearing. In that letter, the OEB provided parties with an opportunity to file written submissions on the issues to be addressed in an oral hearing and the format any oral hearing might take and for a reply submission by Enbridge Gas.

[9] E.B.O. 188, January 30, 1998, Final Report of the Board, Appendix B: Guidelines for Assessing and Reporting on Natural Gas System Expansion in Ontario

APPrO, Atura Power, Energy Probe, IGUA and Pollution Probe filed written submissions on the scope and format of an oral hearing and Enbridge Gas filed a reply submission.

On September 21, 2023, the OEB issued Procedural Order No. 7, which scheduled a hybrid hearing (in person and virtual) following the written discovery process, in place of the previously planned technical conference and established a revised timeline for the remainder of the proceeding. The OEB also accepted Enbridge Gas's extension request to file responses to interrogatories on its amended application and updated responses to its previous interrogatory and undertaking responses to October 3, 2023 (from September 26, 2023).

On October 3, 2023, Enbridge Gas filed interrogatory responses regarding its amended application and also filed updated interrogatory and undertaking responses.

On October 12, 2023, Environmental Defence filed a letter proposing to update its evidence after reviewing Enbridge Gas's amended application and updated interrogatory responses and also requested direction on the need for Dr. McDiarmid's attendance at the oral hearing.

On October 13, 2023, the OEB set a date for Environmental Defence to file an update to its evidence and confirmed that Dr. McDiarmid's attendance at the oral hearing would be helpful. Environmental Defence filed its updated evidence on October 18, 2023.

On October 18, 2023, the OEB issued a letter, postponing the oral hearing for administrative reasons and cancelled the remaining steps set out in Procedural Order No. 7.

On October 30, 2023, the OEB issued Procedural Order No. 8 setting out new dates for the hybrid hearing and the remaining steps in the proceeding, including an additional procedural step for OGVG to file evidence concerning the greenhouse industry.

On November 3, 2023, Enbridge Gas filed updated reply evidence and updated interrogatory responses to its reply evidence to reflect Environmental Defence's updated evidence.

On November 6, 2023, OGVG filed its evidence.

The OEB held a three-day transcribed hybrid hearing from November 13-15, 2023.

On November 14, 2023, FRPO filed a letter asking that Enbridge Gas provide, as undertakings, simulation modeling for two scenarios related to hybrid alternatives filed in this proceeding.

On November 20, 2023, Enbridge Gas filed a letter confirming that it would provide a response to FRPO's first request with its other undertaking responses but that it should not be required to respond to the second undertaking request. FRPO filed a reply letter on November 21, 2023.

On November 22, 2023, the OEB directed Enbridge Gas to file responses to both of FRPO's additional requests and respond to an additional question from the OEB. The OEB requested that Enbridge Gas respond to the requests for additional information by November 30, 2023.

On November 22, 2023, Enbridge Gas, Environmental Defence and OGVG filed written responses to undertaking requests from the hybrid hearing.

On November 30, 2023, Enbridge Gas filed its argument-in-chief and responses to FRPO's and the OEB's additional requests.

OEB staff and intervenors filed written submissions on December 14, 2023. Enbridge Gas requested, and the OEB accepted, an extension to file its reply submission on January 29, 2024 (from January 18, 2024). Enbridge Gas filed its written reply submission on January 29, 2024.

On January 31, 2024, Environmental Defence filed a letter requesting the OEB grant it leave to file a response to issues and evidence that it believed Enbridge Gas inappropriately raised in its reply submission. On February 5, 2024, Enbridge Gas filed a letter arguing that the OEB should deny Environmental Defence's request to file a further reply and reject the submissions in its January 31, 2024 letter.

On February 15, 2024, the OEB stated that it had reviewed the record and was satisfied that the positions taken by Enbridge Gas and Environmental Defence on Dr. McDiarmid's evidence is sufficiently clear and the OEB did not require further submissions for the purpose of deciding the application. Additionally, the OEB stated that any new evidence in reply argument by Enbridge Gas will not be considered in the OEB's findings.

On February 16, 2024 Enbridge Gas filed an update to the application to include the Ministry of Energy's Letter of Opinion which confirms its opinion that the procedural aspects of the Indigenous consultation undertaken by Enbridge Gas to date for the Project are satisfactory.

3 DECISION

In determining whether the Project is in the public interest, the OEB considered the following issues consistent with the OEB's standard issues list for natural gas leave to construct applications:

1. Project Need
2. Project Alternatives
3. Project Cost and Economics
4. Environmental Impacts
5. Landowner Matters
6. Indigenous Consultation
7. Conditions of Approval

3.1 Project Need

Enbridge Gas noted that the existing capacity on the Panhandle system in the 2022/2023 winter is 737 TJ/d. Enbridge Gas forecasted demand growth beginning in the winter of 2024/2025 and growing annually to 921 TJ/d by the winter of 2030/2031.

Enbridge Gas noted that without an increase to the Panhandle system capacity, there will be shortfalls relative to the forecasted Design Day Demand. Enbridge Gas identified the first capacity shortfall of 66 TJ/d starting in the winter of 2024/2025. The shortfall is projected to grow to 156 TJ/d in the winter of 2028/2029 and to 184 TJ/d in the winter of 2030/2031.

The Panhandle system capacity and Design Day Demand for the period 2019/2020 to 2030/2031 is set out in Table 1 below.[10]

[10] Exhibit B, Tab 2, Schedule 1, page 11, Table 3: Panhandle System Capacity, Design Day Demand and Shortfall, June 16, 2023

Table 1
Projected Demand Surplus/Shortfall (Status Quo)

	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**	**737**	**737**	**737**	**737**	**737**	**737**	**737**	**737**	**737**
Design Day Demand Forecast (TJ/d)	**640**	**656**	**672**	**698**	**730**	**802**	**849**	**863**	**878**	**892**	**906**	**921**
Surplus (shortfall is negative) (TJ/d)	84	69	41	38	6	(66)	(112)	(127)	(141)	(156)	(170)	(184)

Enbridge Gas noted that if leave to construct the Project is granted, the incremental 168 TJ/d of capacity provided by the Project would be sufficient to address the forecasted demand growth through the winter of 2028/2029. The first capacity shortfall is forecast to be 2 TJ/d in the winter of 2029/2030. The timeline and the capacity of projected Design Day Demand surplus/shortfall in the scenario where leave to construct is granted is shown below.[11]

Table 2
Projected Demand Surplus/Shortfall with Incremental Capacity Provided by the Project

	Historical Actuals (TJ/d)			Forecast (TJ/d)								
	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)	**725.00**	**725.00**	**713.00**	**737.00**	**737.00**	**904.00**	**904.00**	**904.00**	**904.00**	**904.00**	**904.00**	**904.00**
Design Day Demand Forecast (TJ/d)	**640.00**	**656.00**	**672.00**	**698.00**	**730.00**	**802.00**	**849.00**	**863.00**	**878.00**	**892.00**	**906.00**	**921.00**
Surplus (negative is shortfall)	84.00	69.00	41.00	38.00	6.00	102.00	55.00	41.00	26.00	12.00	(2.00)	(17.00)

Particulars of the Forecasted Demand that Underpins the Need for the Project

Of the total 168 TJ/d of capacity provided by the Project, incremental contract customer demand is forecast to take up 94% of the total capacity and general service customer incremental demand is projected to take up approximately 6% of the total incremental Project capacity. The majority of the contract demand is by power generators,

[11] Exhibit I.STAFF.6, Table 1: Panhandle System Capacity (following reinforcement), Design Day Demand and Shortfall

approximately 53% of the incremental capacity, followed by the greenhouse sector, approximately 25% of the incremental capacity.

Enbridge Gas predicted that the ratio of contract customers' use of the Panhandle system will steadily increase relative to general service customers. In 2022/2023 the ratio of contract to general service demand on the Panhandle system was 56:44. By the winter of 2033/2034, the ratio of contract to general service demand on the Panhandle system is expected to be 66:34.[12]

General Service Demand Forecast

The general service rate category includes residential, commercial, and small industrial customers. Enbridge Gas forecasted that approximately 6% of the incremental 168 TJ/d of capacity provided by the Project would be used by general service customers.[13]

Enbridge Gas stated that the Project would ensure safe and reliable service by maintaining sufficient Panhandle system capacity to serve the growth of general service customers for, at least, four years.[14]

As of the winter of 2022/2023, approximately 44% of the firm demand served by the Panhandle system is for general service customers. Enbridge Gas forecasted that general service customer demand in the Panhandle area will increase by a total of approximately 4.6% between winter 2022/2023 and 2030/2031.[15] This forecast for general service demand growth was derived from Enbridge Gas's attachment forecast, which was converted into a volumetric forecast using average volumetric demand and considering the geographic location of the expected new attachments.

Contract Demand Forecast

The contract rate category includes, but is not limited to, large volume commercial, greenhouse and power generator customers. In order to forecast demand in contract customers category, Enbridge Gas administered, between February 23, 2023 and April 6, 2023, a non-binding Expression of Interest (2023 EOI) and Binding Reverse Open Season (ROS) process.

[12] Exhibit I.APPrO.6
[13] Exhibit B, Tab 1, Schedule 1, pages 10-11, paragraph 36, June 16, 2023
[14] Exhibit B, Tab 1, Schedule 1, page 11, paragraph 38, June 16, 2023
[15] Exhibit B, Tab 1, Schedule 1, page 10, paragraph 36, June 16, 2023

The demand for incremental firm service by the power generation sector is a key driver for the Project. This demand is underpinned by a directive by the Ontario Minister of Energy, dated October 6, 2022, to the Independent Electricity System Operator (IESO) to procure 1,500 MW of natural gas fired generation capacity for 2025 to 2027 in-service dates (Directive).[16] In response to the Directive, the IESO has procured, and is in the process of procuring, contracts for additional natural gas fired generation capacity in Ontario including the existing generator expansions in the Panhandle region.

The demand for incremental firm service on the Panhandle system by the greenhouse sector in the Windsor-Essex and Chatham-Kent area is another key driver of the need for the Project.

Enbridge Gas stated that it plans to execute distribution service contracts with customers who expressed interest for service commencing in 2024 and 2025 and secure the remaining contracts from contract rate customers in the years to follow.[17]

In response to the 2023 EOI, Enbridge Gas received 42 expressions of interest with a firm contract demand of 131 TJ/d starting in 2024 and 2025. Enbridge Gas indicated that it combined the 2023 EOI results with the previously contracted volumes from the 2021 EOI and the volumes contracted in the normal course of business to determine the total demand forecast of 197 TJ/d for the 2024 to 2033 period.

Of the 42 bids received from 39 entities by April 6, 2023, in the 2023 EOI, 38 were from the greenhouse sector, two from the electricity generation (power) sector and two from the commercial sector.[18]

Enbridge Gas's total forecast incremental firm demand, by year, on the Panhandle system of 197 TJ/d for the period 2024 to 2033 is shown in Table 3 below.

[16] Exhibit B, Tab 1, Schedule 1, page 17, paragraph 57, June 16, 2023
[17] Exhibit B, Tab 1, Schedule 1, page 7, paragraph 26, page 10, paragraph 33; Attachment 8: 2023 Expression of Interest Non-Binding Bid Form, Attachment 9: 2023 Distribution Service Binding Reverse Open Season Form; and Exhibit B, Tab 1, Schedule 1, pages 10-11, paragraphs 36-38, June 16, 2023
[18] Exhibit B, Tab 1, Schedule 1, page 7, paragraph 26, June 16, 2023

Table 3
Panhandle Region Expansion Project – EOI and Reverse Open Season[19] by Year

m3/hour	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Total
New/Incremental Firm		52,432	84,503	37,807	25,802	32,952	17,204	13,732	12,547	7,277	2,325	286,581
Interruptible to Firm Conversion		66	8,484	-	-	-	-	-	-	-	-	8,550
Firm Turnback		-	-	-	-	-	-	-	-	-	-	-
Firm to Interruptible Conversion		-	-	-	-	-	-	-	-	-	-	-
Net New/Incremental Firm (by year)		52,498	92,987	37,807	25,802	32,952	17,204	13,732	12,547	7,277	2,325	295,131
Net New/Incremental Firm (cumulative)		52,498	145,485	183,292	209,094	242,046	259,250	272,982	285,529	292,806	295,131	
New/Incremental Interruptible (by year)		-	-	441	-	-	500	-	-	-	500	1,441
New/Incremental Interruptible (cumulative)		-	-	441	441	441	941	941	941	941	1,441	
Firm TJ/day (by year)		33	71	24	16	21	11	9	8	5	1	197
Firm TJ/day (cumulative)		33	104	127	143	164	175	183	191	196	197	

The demand from the 2023 EOI of 131.2 TJ/d represents approximately 78% of the demand for the incremental capacity of 168 TJ/d created by the Project. In addition to the demands by contract customers through bidding in 2023, Enbridge Gas has also been negotiating with additional potential contract customers who did not submit 2023 EOI bids and are prospective customers looking to locate in Windsor, Essex County, and Chatham-Kent. Enbridge Gas stated that it will likely acquire additional contract customers through these negotiations.

According to Enbridge Gas,[20] the bids by power generators (contracted and negotiating) for capacity of 88.8 TJ/d received in 2023 EOI represent approximately 53% of the incremental capacity added by the Project. Contracted demand and demand under negotiation per 2023 EOI for power generators represent approximately 68% of total 2023 EOI demand of 131.2 TJ/d.

Enbridge Gas has already executed four distribution service contracts – one with a power generator and three with greenhouse sector customers. The contract with the power generator is a five-year contract for 57.4 TJ/d which reflects about 34% of the incremental capacity that would be created by the Project. The three contracts with the

[19] Enbridge Gas received no requests, through the ROS process, from the existing customers seeking to de-contract existing firm or interruptible capacity.
[20] Exhibit I.STAFF.20 (a)

greenhouse sector customers are for a total of 4.6 TJ/d.[21] In total, these four executed contracts make up for 62 TJ/d (or 36.6%) of the incremental capacity that would be created by the Project.

Power Generation Sector Demand

In the 2023 EOI, Enbridge Gas received bids for natural gas service contracts from two power generator operators – Atura Power and Capital Power Corporation (Capital Power).[22]

Enbridge Gas has executed one firm distribution service agreement with Atura Power for 57.4 TJ/d to supply natural gas to Brighton Beach GS[23] starting in 2024. Atura Power provided a letter of support for the Project and participated in the proceeding.[24] Enbridge Gas indicated that the Brighton Beach GS, doing business as Atura Power, executed a 10-year contract with the IESO for 42.4 MW efficiency upgrades to meet the local power generation needs between 2024 and 2028. Brighton Beach Clean Energy Supply Contract, between Atura Power and IESO (Brighton Beach CER Contract), was executed to provide 540 MW capacity with a ten-year term expiring on July 15, 2034. Exhibit X of the Brighton Beach CER Contract[25] contains a clause that states that 60% of any “contribution in aid of construction” that might be required as a result of the prospective Panhandle Decision would be covered by IESO and the remaining 40% by Atura Power.

Enbridge Gas is also in the process of negotiating for additional capacity starting in 2025. Two generators submitted bids for services starting in 2025 for 6.3 TJ/d and 25.1 TJ/d respectively.[26]

Enbridge Gas is negotiating a distribution service contract with Atura Power for additional firm capacity of 6.3 TJ/d for the Brighton Beach GS efficiency upgrades. The additional capacity of 6.3 TJ/d combined with the existing executed contract for 57.4 TJ/d results in 63.7 TJ/d of contracted capacity to be available to Brighton Beach GS.

[21] Undertaking J2.12, dated November 22, 2023
[22] Exhibit B, Tab 1, Schedule 1, page 7, paragraph 26, June 16, 2023
[23] Brighton Beach GS operates under the existing contract with the IESO that expires on July 16, 2024
[24] Exhibit B, Tab 1, Schedule 1, Attachment 5, June 16, 2023
[25] K2.5 SEC PREP Hearing Compendium, November 13, 2023, pages 56-58
[26] Exhibit I.STAFF.24, Table 1: 2024 and 2025 Incremental Customer Demand Requirements (Underpinned by Firm Distribution Contract and in Negotiation) by Customer and Sector, page 2

Atura Power stated that its contracted capacity would take up almost 40% of the total incremental capacity of the Project.[27]

Enbridge Gas is also negotiating a distribution service contract with Capital Power to provide 25.1 TJ/d natural gas distribution service to its East Windsor Cogenerating Station (East Windsor GS) starting in 2025. In January 2023, Windsor City Council voted to support an energy proposal from Capital Power for expansion at its existing East Windsor Cogeneration Centre location. The IESO's May 16, 2023, Resource Adequacy Update highlighted that the East Windsor Cogeneration Centre location was awarded an incremental 100 MW contract.[28] Capital Power was awarded a standard form of Expedited Long-Term Reliability Services (E-LT 1) Contract which has no clause for sharing or paying any capital contribution.[29]

Combined incremental demand on the Panhandle system for the three power generation contracts is approximately 89 TJ/d, which represents about 53% of the total 168 TJ/d incremental capacity to be created by the Project.

Greenhouse Sector Demand

The demand for incremental firm service on the Panhandle system by the greenhouse sector in the Windsor-Essex and Chatham-Kent area is another key driver of the need for the Project. Enbridge Gas received 38 bids from greenhouses through the 2023 EOI and three contracts have been executed. Greenhouses use natural gas for space heating, electricity generation and carbon-dioxide production which is essential for plant growth. The total volume of bids by greenhouse sector for firm service contracts for 2024 and 2025 is approximately 42 TJ/d, representing approximately 25% of the total incremental capacity of 168 TJ/d created by the Project.[30]

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[27] Hybrid Hearing, Transcript Day 1, Atura's Opening Statement, lines 7-19, page 17
[28] Enbridge Gas, Argument-in-Chief, paragraph 36, page 14, November 30, 2023
[29] The E-LT1 Contract is available online at: https://www.ieso.ca/-/media/Files/IESO/Document-Library/long-term-rfp/E-LT1-Contract-incorporating-Addenda-20230203.ashx
[30] Percentages calculated using the information that Enbridge Gas provided at Exhibit I.STAFF.24 (a) Table 1.

Automotive Sector Executed Contract and Potential Demand

Enbridge Gas finalized a distribution service contract with NextStar Energy Inc. (NextStar) for distribution service in September 2023 using existing Panhandle system capacity. NextStar will operate a large-scale electric vehicle (EV) manufacturing facility. NextStar is a joint-venture between LG Energy Solution and Stellantis N.V.[31]

Enbridge Gas stated that after the NextStar EV battery plant was announced it received and responded to multiple confidential inquiries from other EV battery components manufacturers about natural gas service in the Windsor-Essex region. Enbridge Gas concluded that these inquiries indicate that there is potential for even higher demand for firm capacity by manufacturing companies that are seeking to locate in the Panhandle region.[32]

Position of Parties on Project Need

Some parties submitted that Enbridge Gas had established the need for the Project based on the forecast demand in the Panhandle region.[33] APPrO and Atura Power further submitted that the Project is needed to support forecast electricity demand in the region. OGVG supported the Project as it is needed to serve the greenhouse sector. OGVG stated that greenhouse operations will continue to expand in the area served by the Panhandle system and indicated "…the need for new natural gas capacity in the next three years."[34]

Pollution Probe and Three Fires Group expressed concerns that Enbridge Gas's demand forecast was overly dependent on the results of the EOI and indicated that it was not certain that all of this demand would materialize, given the non-binding nature of the EOI. Environmental Defence, Energy Probe, and Pollution Probe indicated that some forecast demand might not materialize should a capital contribution be required from new contract customers (which these parties believed would be appropriate), therefore the need for the project should be re-evaluated once the OEB has made a determination on whether a capital contribution would be required. Energy Probe did not dispute the demand forecast but believes that "…if the customers served by the

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[31] Exhibit B, Tab 1, Schedule 1, page 5, paragraph 18, June 16, 2023
[32] Exhibit B, Tab 1, Schedule 1, page 20, paragraph 65, June 16, 2023
[33] Atura Power, APPrO, OGVG, OEB Staff, SEC
[34] Hybrid Hearing Transcript Day 1, page 33, lines 16-19

Panhandle pipeline are unwilling to pay for it, then there is no need for the pipeline or OEB approval."[35]

Energy Transition Implications on Future Natural Gas Demand

Separate from the near-term need for the Project, some parties[36] raised the question of the impacts that electrification and energy transition could have on natural gas demand in future years, including the question of cost recovery for potentially stranded Project-related assets, should demand decline. These parties, in their submissions, discussed the appropriate length of the revenue horizon used to calculate the Project's revenue shortfall, and if a capital contribution should be paid by the contract customers driving the majority of the need for the Project expansion to address this shortfall. These issues will be addressed in the Economics section of the decision.

In contrast, Enbridge Gas indicated that natural gas demand is currently forecast to continue increasing, and there is a potential need for another phase of expansion to meet future growth in the Panhandle region. With respect to potential future system expansions, Enbridge Gas noted that it would assess the capacity available on the Panhandle system each year and evaluate whether an IRP alternative could feasibly delay the need for further physical capacity beyond the winter of 2028/2029.[37] The issues of IRP implementation as an alternative to adding physical capacity to the Panhandle system by the Project and potential future natural gas facilities projects will be addressed in the Project Alternatives section of the decision.

Decision on Project Need (Commissioners Moran, Dodds and Sword)

The OEB finds that Enbridge Gas has demonstrated the need for the Project. Enbridge Gas has forecasted load growth in the large volume commercial, greenhouse and power generation sectors that cannot be met by the existing Panhandle system. Enbridge Gas's demand forecast shows there is a need for an incremental 168 TJ/d of capacity on the Panhandle system that will be met by the Project. The incremental capacity created by the Project addresses the forecast capacity shortfall on the Panhandle system until the 2028/2029 winter. Enbridge Gas forecasted that if the Project is approved, the first shortage of 2 TJ/d will occur in the winter of 2029/2030.[38]

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[35] Energy Probe Submission, page 2
[36] Energy Probe, Environmental Defence, OEB staff, Pollution Probe, SEC, Three Fires Group
[37] Exhibit I.STAFF.6 (a)
[38] Exhibit I.STAFF.6, Table 1: Panhandle System Capacity (following reinforcement), Design Day Demand and Shortfall

Of the total 168 TJ/d of capacity provided by the Project, incremental contract customer demand is forecast to take up 94% of the total Project capacity. General service customer incremental demand is projected to take up the remaining 6% of the total Project capacity.

The large contract customers include prospective large volume commercial, greenhouse and power generation customers. Together, the power generation and greenhouse sectors are the main drivers for the capacity provided by the Project. Approximately 53% of the new capacity that will be delivered by the Project is required to serve gas-fired generation that the IESO has contracted with to meet growing demand for electricity in the Windsor-Essex area. The total volume of bids by the greenhouse sector for firm service contracts for 2024 and 2025 is approximately 42 TJ/d, representing approximately 25% of the total incremental capacity of 168 TJ/d created by the Project.

The Project also helps alleviate the largest Panhandle system bottleneck which will improve reliability of service for existing customers and enable demand growth for both existing and new customers.

The OEB does not accept the concerns raised by Pollution Probe and Three Fires Group that Enbridge Gas's demand forecast was overly dependent on the results of the Expressions of Interest or EOI. Ultimately, the results of the EOI are the best information available. Moreover, the OEB heard evidence in the proceeding that additional demand, beyond what was included in the forecast, may materialize as a result of the recent announcement of the NextStar EV battery plant.[39]

3.2 Project Alternatives

Enbridge Gas argued that the Project is the best alternative to provide 168 TJ/d of incremental capacity to meet the forecasted demand from November 1, 2024, to the winter of 2028/2029. Enbridge Gas submitted that the Project has the lowest cost per unit of capacity.

Enbridge Gas noted that the Project addresses the pressure bottleneck between Dover Transmission Station and Comber Transmission Station. Enbridge Gas also stated that the location of the tie-in facilities at Richardson Sideroad near the existing roads reduces the potential environmental impacts.

[39] Exhibit B, Tab 1, Schedule 1, page 20, paragraph 65, June 16, 2023

Enbridge Gas's assessment of alternatives involved identification of potential alternatives that could address the forecasted incremental demand including facility alternatives, hybrid alternatives (supply side IRP alternatives combined with facility) and non-facility alternatives.[40]

Enbridge Gas assessed the viability of the alternatives to meet the forecast demand using the following criteria:[41]

- Cost Effectiveness - total cost, cost per unit of capacity, net present value
- Timing – an in-service date of November 1, 2024, is required, five-year forecast firm demand
- Safety and Reliability – qualitative assessment
- Risk Management – qualitative indicators such as price increase risk and availability
- Environmental and Socio-Economic Impacts - qualitative assessment of impacts on Indigenous peoples, landowners, municipalities, and environment

Facility Alternatives

In addition to the Project, one additional viable facility alternative was subject to an in-depth evaluation in order to select the preferred alternative. The additional viable facility alternative Enbridge Gas considered was to parallel the existing NPS 20 pipeline with NPS 30 pipeline. The assessment by Enbridge Gas determined that either a NPS 30 or NPS 36 pipeline to Richardson Sideroad would be sufficient to meet the five-year growth forecast. However, Enbridge Gas selected the NPS 36 pipeline as the preferred alternative. Enbridge Gas explained that although the NPS 30 alternative has lower capital costs, the NPS 36 option is more cost effective when maintenance costs are also considered as the NPS 36 option avoids costs associated with multiple pipeline inspection programs.

Table 4 sets out Enbridge Gas's comparison of the incremental capacity and cost effectiveness of a NPS 30 pipeline relative to a NPS 36 pipeline, which highlights the anticipated advantages of the proposed Project.[42] The NPS 30 alternative would create an estimated 8 TJ/d less capacity than the Project, has a marginally lower total cost of $342.7 million and a higher cost per unit capacity (i.e., $2.14 TJ/d (alternative) vs $2.13

[40] Exhibit I.STAFF.7, Attachment 1, Comparison of Viable Alternatives and Exhibit I.STAFF.7, Attachment 2, Comparison of Non-Viable Alternatives
[41] Exhibit C, Tab 1, Schedule 1, pages 3-4, June 16, 2023
[42] Exhibit C, Tab 1, Schedule 1, pages 7-9, June 16, 2023

TJ/d (proposed Project). OEB staff submitted that this alternative, although viable and less costly on a total cost basis, is not a preferred option as it does not create the incremental capacity required to meet the need in the winter of 2028/2029 and is at a slightly higher unit cost per TJ/d.[43]

Table 4
Panhandle Loop – Economic Assessment

Potential Alternative	Incremental Capacity (TJ/d)	Costs ($ Million)	Net Present Value (1) ($ Million)	Cost per Unit of Capacity ($/TJ/d)
Facility Alternative: Looping of NPS 20 Panhandle				
Proposed Project 19 km Loop with NPS 36	168	$358.0	$(153.5)	$2.13
19 km Loop with NPS 30	160	$342.7 (2)	$(144.6)	$2.14

1. The calculation of the Net Present value does not include overheads
2. The estimated cost of $342.7 million for an NPS 30 alternative is based on a November 1, 2024 in-service date, for the purpose of displaying a direct comparative to the proposed Project. The actual installation of an NPS 30 alternative would result in a November 1, 2025 in-service date and as such the estimated cost would be higher due to inflationary impacts.

Enbridge Gas considered three more facility alternatives but dismissed them from further considerations assessing them as non-viable:[44]

- Replace and upsize the existing NPS 16 Panhandle Line west of the Dover Transmission Station
- Replace and upsize the existing NPS 20 Panhandle Line west of the Dover Transmission Station
- New LNG facilities

The two replacement and upsize pipeline alternatives[45] would require a replacement of the existing NPS 16 or NPS 20 pipeline with a larger diameter pipeline to provide the needed additional capacity. This approach would take the existing pipelines out of service for a period of time and potentially affect the reliability of service to existing

[43] OEB staff Submission, page 28
[44] Exhibit I.STAFF.7, Attachment 2, Comparison of Non-Viable Alternatives – Facility and IRPA, updated
[45] Exhibit C, Tab 1, Schedule 1, pages 5-7, June 16, 2023

customers. Enbridge Gas considered and dismissed these two options early in the alternatives evaluation process because the construction cannot be completed for November 1, 2024, and cannot maintain reliable service to the existing Panhandle customers.[46]

Enbridge Gas also considered constructing an above-ground LNG storage facility along the Panhandle system.[47] Enbridge Gas determined that this alternative was non-viable as it was expected to require more significant investment in both capital and annual operating expenses relative to the preferred option.[48]

Hybrid Alternatives

Enbridge Gas stated that it considered two hybrid alternatives that would involve the available supply at Ojibway and construction of a pipeline to add to system capacity.

The first hybrid alternative would have utilized a 21 TJ/d firm exchange between Dawn and Ojibway beginning November 1, 2024, for a 40-year term coupled with an 18 km NPS 36 pipeline (instead of 19 km). Enbridge Gas stated that the 18 km NPS 36 pipeline would result in an endpoint located in the middle of a landowner's agricultural property, which is not a preferred location.

The second hybrid alternative would have utilized a 21 TJ/d firm exchange between Dawn and Ojibway beginning November 1, 2024, for a 40-year term coupled with a 16.2 km NPS 36 pipeline ending at Wheatley Road. Enbridge Gas noted that this alternative does not provide enough capacity to serve the five-year demand forecast.

Enbridge Gas determined that both options are not economic relative to the proposed Project, as shown in Table 5 below, and also reflect renewal risk associated with the firm exchange component.

[46] Exhibit I.STAFF.7, Attachment 2, June 16, 2023
[47] Exhibit C, Tab 1, Schedule 1, pages 9-10, June 16, 2023
[48] Exhibit C, Tab 1, Schedule 1, pages 13-14, paragraphs 38-39, June 16, 2023 and Enbridge Gas Argument-in-Chief, pages 20-21, paragraph 53

Table 5
Hybrid Alternative Economic Assessment

Potential Alternative	Incremental Capacity (TJ/d)	Costs ($ Million)	NPV ($ Million)	Cost per Unit of Capacity ($/TJ/d)
17.86 km NPS 36 and 21 TJ/d Ojibway to Dawn Exchange	168	*Facility:* $351.0 *O&M:* $4.2 Annually $(66.2) over a 40-year term	$(212.1)	$2.48
16.20 km (i.e., Wheatley Road end-point) NPS 36 and 21 TJ/d Ojibway to Dawn Exchange	153	*Facility:* $330.5 *O&M:* $4.2 Annually $(66.2) over a 40-year term	$(204.0)	$2.59

1. The estimated O&M costs are based on the bid received in the Request for Proposal (RFP). The bid stated pricing is subject to refresh based on the market conditions at the timing of contracting.

Non-Facility Alternatives

Enbridge Gas assessed the following two categories of non-facility alternatives:

- Supply-side alternatives include third-party exchanges between Dawn and Ojibway and the trucked Compressed Natural Gas (CNG)
- Demand-side IRP alternatives interruptible rates, electrification/alternative energy sources and enhanced targeted energy efficiency (ETEE).[49]

Supply-Side Alternatives

Enbridge Gas determined that the supply-side alternatives are not viable and eliminated them from further assessment. Enbridge Gas explored the viability of supply side alternatives by issuing a formal RFP for a Firm and Obligated Call Option Exchange Service beginning between November 1, 2023, and November 1, 2024, and until 2026. Enbridge Gas also approached the existing shipper, ROVER, to express interest in the RFP. ROVER is a transmission pipeline operator that transports gas for other shippers, and it does not hold a title to the natural gas that is transported.[50] No interest was

[49] Exhibit I.STAFF.7, Attachment 2, Comparison of Non-Viable Alternatives
[50] Enbridge Gas Argument-in-Chief, page 23, paragraph 61

received from ROVER. Only one market participant responded to the RFP for 19 TJ/d out of 21 TJ/d delivery capacity available at Ojibway.[51]

With respect to third-party exchanges between Dawn and Ojibway, Enbridge Gas noted that Ojibway supply serves the Windsor region, which is nearby to the Ojibway delivery point. However, this supply source is not available to serve the Panhandle region. Enbridge Gas further explained that of the total 108 TJ/d of capacity operationally available to be delivered to Ojibway annually, 60 TJ/d is already used by Enbridge Gas to serve firm Design Day Demand.

Additionally, ROVER contracted, until October 31, 2026 (with evergreen renewal rights), 37 TJ/d of the remaining 48 TJ/d capacity, which leaves 18 TJ/d to 21 TJ/d to be incrementally available to be delivered to the Panhandle system. Enbridge Gas submitted that this capacity is insufficient to meet the forecast demand shortfall. Therefore, Enbridge Gas determined that the Ojibway alternative was non-viable.[52]

OEB staff submitted that firm third-party exchanges between Dawn and Ojibway is not a viable alternative to address the need for incremental capacity on the Panhandle system for the 2024/2025 to 2028/2029 period. OEB staff submitted that Enbridge Gas demonstrated that the 21 TJ/d of available capacity at Ojibway is not sufficient to address the need. OEB staff concluded that a firm exchange between Dawn and Ojibway is not commercially available and cannot defer the incremental capacity need starting in the winter of 2024/2025.

FRPO submitted that Enbridge Gas did not make sufficient attempts to receive additional firm gas deliveries at Ojibway.[53] Enbridge Gas submitted that there was no "…basis for FRPO's assertions, as the assertions are based on no established facts.". Enbridge Gas explained in its reply argument the reasons why it rejected as non-viable the supply side alternative through deliveries at Ojibway.[54]

The second supply side option that Enbridge Gas considered and eliminated as non-viable was trucking CNG to supply natural gas to Panhandle system customers. This alternative was dismissed based on the complex logistics, the requirement to construct infrastructure facilities, and security of supply risks.[55] OEB staff submitted that trucking

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[51] Enbridge Gas Argument-in-Chief, pages 23-24, paragraphs 60-63
[52] Exhibit C, Tab 1, Schedule 1, pages 15-16, paragraphs 44-45, June 16, 2023 and Enbridge Gas Argument-in-Chief, pages 22-23, paragraphs 57-61
[53] FRPO Submission, page 1
[54] Enbridge Gas Reply Submission, , pages 71-74, paragraphs 158-165
[55] Exhibit C, Tab 1, Schedule 1, page 23, paragraphs 68-69, June 16, 2023

CNG is not a viable alternative because of the complexity of delivering more than 400 truckloads per day and the requirement for additional infrastructure construction.

Demand-Side Alternatives

The sub-sections below summarize the three demand-side alternatives considered by Enbridge Gas: (i) ETEE; (ii) interruptible rates; and (iii) electrification/alternative energy sources. ETEE was considered by Enbridge Gas as an IRP alternative. Interruptible rates and electrification/alternative energy source options were taken into account by Enbridge Gas through adjustments to the demand forecast underpinning the Project need.

Enbridge Gas concluded that ETEE is not technically viable, as it cannot meet the forecasted demand growth, and that the impact on peak demand of interruptible rates and electrification/alternative energy sources had already been properly accounted for in Enbridge Gas's demand forecast, thus the Project need still remained.

Enhanced Targeted Energy Efficiency

On behalf of Enbridge Gas, Posterity Group (Posterity) conducted an assessment of the potential peak demand reduction that could be provided by ETEE as an IRP alternative (i.e., reducing peak demand in the area served by the Project by increasing uptake of energy efficiency measures, through the use of higher customer incentives or enhanced marketing, relative to the baseline of energy efficiency programming offered through Enbridge Gas's existing demand-side management programs). This assessment was originally done only for the Leamington area, but a second assessment was later conducted by Posterity that included a larger geographic area served by the Panhandle system (Windsor and Chatham areas, in addition to Leamington), providing a larger customer base for peak demand reductions.

Posterity's assessment concluded that a maximum peak hour reduction potential of approximately 72,000 m^3/hour (57 TJ/day) from general service customers could be obtained by the winter of 2029/2030. Based on Posterity's assessment, Enbridge Gas concluded that ETEE is not technically viable, as it cannot meet the forecasted demand growth. During the hearing, Enbridge Gas also indicated that the possible savings from ETEE could not address the need for the Project, even if combined with other alternatives, such as supply-side alternatives, due to timing issues. Enbridge Gas noted that the 57 TJ/day of potential savings from ETEE is an estimate of what could be achieved by the winter of 2029/2030 (assuming multiple prior years of ETEE program activity), yet there is a 66 TJ/day deficit on the Panhandle system as soon as the winter of 2024/2025.[56]

Enbridge Gas also submitted that ETEE had a higher cost per unit of capacity relative to the Project ($8.2 million/TJ/day vs $2.14 million/TJ/day). However, this cost comparison is based only on the cost to Enbridge Gas, not the full three-phase test (Discounted Cash Flow-Plus (DCF+) test) used to compare costs and benefits of technically viable alternatives under the IRP Framework, and thus does not account for any on-bill commodity cost savings that participating customers realize from ETEE.[57]

Environmental Defence submitted that these on-bill savings for customers need to be considered in determining whether or not ETEE is economically feasible.

Posterity's analysis of the potential of ETEE was limited to general service customers. Enbridge Gas expressed the view that ETEE opportunities for contract customers, including greenhouses, are limited, and these customers will already be making full use of Enbridge Gas's existing demand-side management (DSM) programs.[58] Enbridge Gas also indicated that the results of existing DSM activities would be captured within customer bids. Enbridge Gas's updated 2023 EOI asked customers seeking incremental capacity to confirm that their EOI bid amounts were inclusive of all future expected natural gas conservation activities, including natural gas conservation activities within and outside of Enbridge Gas's DSM programs. Enbridge Gas also noted that energy efficiency that is realized in the contract market does not always result in a reduction in customer contract demand, as peak hour efficiencies can be used by the customer to expand operations and increase production.

In an undertaking response,[59] Enbridge Gas performed a rough extrapolation of Posterity's results to the contract sector (excluding power generators) and estimated a peak hour reduction potential for contract customers from ETEE of 21 TJ/day by 2029. However, Enbridge Gas cautioned against the use of this result for the reasons discussed above (i.e., future expected natural gas conservation activities for contract customers is already taken into account in customer bids and the potential for energy efficiency improvements to be used by the customer to expand operations and increase production instead of reducing demand).

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[56] Hybrid Hearing Transcripts, Vol. 3, pages 81-82
[57] Hybrid Hearing Transcripts, Vol. 2, pages 149-150
[58] Exhibit I.STAFF.10. See also Technical Conference Transcript Vol. 2, pages 66-70; Hybrid Hearing Transcripts, Vol. 2, pages 139-145
[59] Exhibit J2.10

Environmental Defence submitted that, based on relative share of peak demand, the peak hour reduction potential for contract customers should be much higher (79 TJ/day).[60]

In its reply submission, Enbridge Gas indicated that Environmental Defence's forecast was overestimated, as unlike general service customers, a higher degree of energy demand from contract customers is for non-weather sensitive end-uses and peak hour reduction potential is thus proportionally lower.

OEB staff, Environmental Defence, and Pollution Probe submitted that the potential role of ETEE for contract customers, including greenhouse customers, should be given more consideration by Enbridge Gas.[61] OEB staff submitted that for all new or existing contract customers entering into natural gas contracts for additional firm capacity on the Panhandle system, Enbridge Gas should be required to proactively engage these customers to identify potential energy efficiency opportunities.[62] This could include an on-site audit or assessment of any existing operations, an analysis of any energy efficiency opportunities in planned new operations, and identification of any Enbridge Gas programs that may support investments in energy efficiency measures.

With regard to greenhouse customers, OGVG's witness, Dr. Petro, confirmed that these customers are participating in Enbridge Gas's DSM programs, but was not able to comment as to whether there was anything more Enbridge Gas could or should be doing to further improve its energy efficiency programs for the greenhouse sector.[63]

OGVG submitted that greenhouse operators are active participants in trying to reduce their natural gas consumption, including participating in Enbridge Gas's DSM programs, but this was not a substitute for firm natural gas service, given the consequences to greenhouse operators of the loss of heating and carbon dioxide supply. OGVG also agreed with Enbridge Gas that ETEE may not impact the need for firm natural gas capacity at the system peak, which drives the need for the Project.

Interruptible Rates

Demand from customers on interruptible rates is not included by Enbridge Gas in its Design Day Demand forecast, as Enbridge Gas can curtail these customers if needed.

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[60] Environmental Defence Submission, page 15
[61] OEB staff's comments on this topic were in reference to consideration of IRP alternatives for a potential future phase of the Panhandle system expansion, not the Project.
[62] OEB staff Submission, page 32
[63] Hybrid Hearing Transcripts, Vol. 3, pages 174-176

For this reason, the IRP Framework indicates that Enbridge Gas should consider the impact of interruptible rates to meet system needs.[64] Enbridge Gas has the flexibility to propose modifying its interruptible rates within the area served by the Project as part of an IRP Plan, in order to increase customer adoption.[65]

In its original application, Enbridge Gas noted that it provided existing contract rate and large volume general service customers the opportunity to turnback firm or interruptible capacity or convert existing firm capacity to interruptible capacity in the Area of Benefit, including the use of a ROS. Enbridge Gas received no requests to turn back capacity as part of the Binding ROS.

In its updated EOI/ROS process in February 2023, customers were asked to provide additional information regarding the viability of interruptible service as an alternative to new firm service, including whether they would be more inclined to consider interruptible service over new firm service if the ability to negotiate lower than posted interruptible rates was available. Of the 42 EOI bids received, only two bids indicated that interruptible service was a viable alternative and that they could rely on alternate fuel sources during an interruption event. For those two bids, interruptible service was not requested, nor was there an accompanying ROS request to convert existing firm service to interruptible service. The firm demands from these two bids were not included in the updated demand forecast Enbridge Gas filed in support of its updated application.

Customers were also invited to indicate whether they would be more inclined to consider interruptible service over new firm service if the ability to negotiate lower than posted interruptible rates was available. There were five bids received (8% of total 2023 EOI interest, inclusive of the two bids referenced in the paragraph above) where customers indicated they would consider interruptible rates. Enbridge Gas indicated that it will work with these five customers to determine if their future natural gas requirements can be met with interruptible service despite their bid for new/incremental firm service. The firm demands from these five bids were not included in the updated demand forecast.

OEB staff submitted that Enbridge Gas had adequately considered interruptible rates and that there was no evidence to suggest that the actual demand reduction from

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[64] EB-2020-0091, Decision and Order, page 6, July 22, 2021
[65] EB-2022-0200, Decision on Settlement Proposal, Exhibit O1, Tab 1, Schedule 1, page 50 of 62, August 17, 2023

interruptible rates would likely be greater than the adjustment Enbridge Gas has made to its forecast.

Alternative Energy Sources (including Electrification)

Electrification of space heating or other end uses (for contract customers in the greenhouse sector or for general service customers) could also reduce natural gas peak demand and the forecast shortfall on the Panhandle system. Enbridge Gas did not explicitly consider providing funding for electrification as an IRP alternative (for the greenhouse sector or for general service customers), as it indicated that this is not permitted under the IRP Framework.[66] OEB staff agreed that Enbridge Gas is not required to consider funding electrification alternatives under the IRP Framework, while Environmental Defence noted that it had requested in Enbridge Gas's rebasing proceeding that the OEB clarify that Enbridge Gas can now seek approval for IRP alternatives that involve electrification.[67] Environmental Defence submitted that the OEB's determination in that proceeding may affect whether electrification could have a role as an IRP alternative in this area.[68]

Enbridge Gas's demand forecast for the Panhandle region includes a small amount of fuel switching away from natural gas (likely switching to electricity) for general service customers in the coming years, using the same energy transition assumptions that Enbridge Gas applied to its demand forecast on a system-wide basis in its current rebasing proceeding.[69] In considering the potential for the pace of electrification to be more rapid than Enbridge Gas's forecast, Enbridge Gas estimated that a reduction of 52% in general service natural gas peak demand would be required by Winter 2029/2030 to offset the forecast growth in contract market natural gas demand that is underpinning the Project need.[70] Enbridge Gas also submitted that extensive, currently unplanned, electricity system investments would be required, both within the region's electric distribution system, but also at the provincial transmission and capacity level, to accommodate this level of electrification.[71]

OEB staff submitted that Enbridge Gas's energy transition forecasting assumptions likely underestimate the pace of electrification among general service customers, but

[66] Hybrid Hearing Transcripts, Vol. 3, page 71
[67] EB-2022-0200
[68] Environmental Defence Submission, pages 16-17
[69] These assumptions are described in: EB-2022-0200, Exhibit 1, Tab 10, Schedule 4, page 6
[70] Enbridge Gas Reply Submission, pages 10-11
[71] Enbridge Gas Reply Submission, pages 13-14

that customer-driven electrification will not reduce natural gas demand by the amount that would be required to avoid the Project.

Enbridge Gas's demand forecast did not assume any electrification of contract customers, including greenhouse customers. Enbridge Gas indicated that it does not believe that there is an economically feasible alternative to natural gas for the greenhouse sector.

Evidence was also filed on behalf of Environmental Defence and OGVG, by Dr. McDiarmid and Dr. Petro, respectively, that discussed the potential for greenhouse customers to switch to electric heat pumps (including geothermal systems) or other non-gas systems for some or all of their space heating needs. Dr. McDiarmid indicated that technically viable alternatives to natural gas exist for greenhouses.[72] However, Dr. McDiarmid indicated that this conclusion does not consider economic feasibility, and that she was not aware of any commercial greenhouse operations in Ontario using electric heat pumps.[73]

Dr. Petro also indicated that he was not aware of any commercial greenhouse operations in Ontario using electric heat pumps as their primary source of heating. Dr. Petro further indicated that the use of natural gas as the heating source offered greenhouse producers a significant economic advantage by also providing the carbon dioxide used by growers as an input to crop production.[74] Carbon dioxide is a critical production input which otherwise would need to be separately purchased and is subject to significant pricing volatility. Dr. Petro also indicated that several other factors (i.e., limits on the maximum size of commercially available heat pumps, large land requirements for geothermal systems, and constraints on electricity supply to the area) also contributed to making use of heat pumps infeasible for commercial greenhouses in the Panhandle region.[75]

Dr. Petro also discussed the use of biomass, indicating that it had value as a secondary heating fuel when available, but could not provide the level of reliability and security of supply that greenhouses require to ensure that they can meet their heating needs at all times and do not risk crop failure.[76] OGVG submitted that firm natural gas capacity was

[72] McDiarmid Climate Consulting, Evidence regarding stage 2 analysis and gas alternatives for Greenhouses, Updated October 18, 2023, pages 6-7.
[73] Hybrid Hearing Transcripts, Vol. 1, pages 95-96
[74] OGVG, Evidence of Dr. Petro, pages 2-3, November 6, 2023
[75] Hybrid Hearing Transcripts, Vol. 3, pages 172-174
[76] Hybrid Hearing Transcripts, Vol. 3, page 133

a requirement for the expansion of the greenhouse sector and that alternatives to firm natural gas service to meet the combined heating, cogeneration and carbon dioxide supplementation needs of the industry are not feasible. OEB staff agreed, submitting that electrification of the greenhouse sector, or more extensive use of biomass, are unlikely to significantly reduce the sector's demand for natural gas, at least in the near term.

OEB staff also noted that non-gas options will not be applicable to serving natural gas-fired power generators, which account for more than 50% of the incremental capacity created by the Project. Atura Power submitted that natural gas-fired generation plays a crucial role in ensuring and maintaining the reliability of the electricity grid and provides services that other electricity resources cannot provide.

Positions of Parties on Project Alternatives

Considering the alternatives described above, OEB staff and several parties (APPrO, Atura Power, OGVG, SEC) submitted that the Project is the best alternative to meet the forecasted demand growth on the Panhandle system, at least for the near-term need the Project is intended to meet.

Energy Probe and FRPO expressed a preference for supply-side alternatives (the NPS 30 alternative, and increased firm deliveries at Ojibway, respectively).

Environmental Defence and Pollution Probe both recommended that the OEB deny leave to construct and require Enbridge Gas to give further consideration to IRP alternatives. Pollution Probe also expressed more general concerns about Enbridge Gas's process for developing and consulting with stakeholders on IRP alternatives.[77]

Decision on Project Alternatives (Commissioners Moran, Dodds and Sword):

The OEB finds that the Project is the best alternative to meet the forecasted demand growth on the Panhandle system for the period November 1, 2024, to the winter of 2028/2029.

Enbridge Gas assessed a comprehensive list of alternatives to determine whether there was an economically viable alternative that would defer or avoid the need for the Project. The OEB finds the evidence supports the conclusion that there is no viable alternative to meet the demonstrated need.

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[77] Pollution Probe Submission, pages 22-24

The alternatives that were examined by Enbridge Gas are discussed below.

Facility Alternatives

Alternative 1

Enbridge Gas considered using the same route to install a NPS 30 diameter pipeline (instead of a NPS 36 diameter pipeline). This alternative would create an estimated 8 TJ/d less capacity than the Project, has a marginally lower total cost of $342.7 million and a higher cost per unit capacity (i.e., $2.14 TJ/d (alternative) vs $2.13 TJ/d (proposed Project)).

Energy Probe submitted that, compared to the NPS 30 alternative, the preferred alternative (NPS 36) is not the lowest cost alternative nor is it the alternative with the least negative NPV and should not be preferred.

In supporting the NPS 30 alternative, Energy Probe also submitted that Enbridge Gas failed to consider appropriately the differences in heating values of gas at different delivery points on their system because Enbridge Gas calculates an average heating value on a system wide basis and not on a Panhandle system basis. If gas delivered to the Panhandle system has a higher heating value than the system wide average heating value, this would militate in favour of a smaller diameter pipeline being needed.

The OEB finds that the NPS 30 alternative, although viable and less costly on a total cost basis, is not a preferred option as it does not create the incremental capacity required to meet the need in the winter of 2028/2029 and is at a slightly higher unit cost per TJ/d.

The OEB is of the view that Enbridge Gas's use of the system wide average heating value is an acceptable proxy for the Panhandle system, given the size of the Panhandle system and the range of delivery points.

Alternatives 2 and 3

Enbridge Gas considered replacement and upsizing of the existing NPS 16 (Alternative 2) and replacement and upsizing of the existing NPS 20 Panhandle pipeline west of Dover (Alternative 3).

Enbridge Gas determined that the construction for either of these facility alternatives cannot be completed for November 1, 2024, and affected the ability to maintain reliable service to the existing Panhandle customers. Accordingly, the OEB finds that it was appropriate for Enbridge Gas to reject these alternatives.

Alternative 4

Enbridge Gas considered the alternative of construction of a new LNG storage facility.

The OEB finds this alternative is not viable as the cost is higher than the Project cost, it does not create sufficient capacity and it cannot be constructed in time to be in-service for the winter of 2024/2025.

Hybrid Alternatives

Enbridge Gas considered two hybrid alternatives that would involve the utilization of available supply at Ojibway and construction of a pipeline to add to the system capacity:

- 21 TJ/d firm exchange between Dawn and Ojibway beginning November 1, 2024, for a 40-year term coupled with a 17.86 km NPS 36 pipeline (instead of 19 km)
- 21 TJ/d firm exchange between Dawn and Ojibway beginning November 1, 2024, for a 40-year term coupled with a 16.2 km NPS 36 pipeline ending at Wheatley Road

FRPO requested the simulation results for the two hybrid alternatives assessed by Enbridge Gas. In its undertaking responses, Enbridge Gas provided the schematics and tables showing the pressures and flows related to the two hybrid alternatives.[78] FRPO also requested that Enbridge Gas provide the simulation results and costs for a scenario where 37 TJ/d was available from Ojibway to Dawn exchange and the length of the NPS 36 was shortened to a comparable amount of incremental capacity. Enbridge Gas provided the information and schematic for the scenario requested by FRPO.[79]

FRPO submitted that Enbridge Gas did not make sufficient attempts to receive additional firm gas deliveries at Ojibway. Enbridge Gas submitted that although a supply-side IRP alternative was not available to offset the entirety of the Project need, Enbridge Gas took the further step of confirming its assessment of the availability of commercial services to deliver incremental firm supply to Ojibway by holding an RFP for a Firm and Obligated Call Option Exchange Service in order to assess alternatives. The results of the RFP confirmed that a firm exchange to Ojibway is not able to defer or eliminate the need for the proposed Project.

[78] Exhibit J2.4, Attachments 1 and 2
[79] Enbridge Gas response to FRPO Additional Request, November 30, 2023

The OEB accepts Enbridge Gas's assessment that both options are not economic relative to the proposed Project and notes that there are other issues with respect to location, inadequate long-term capacity and renewal risk associated with the firm exchange component.

Supply-side Alternatives

Enbridge Gas examined the viability of supply side alternatives through a formal RFP process for capacity and assessment of third-party exchanges. The OEB accepts the assessment of Enbridge Gas (which OEB staff also accepted[80]) that 21 TJ/d of available capacity at Ojibway is not sufficient to address the need and a firm exchange between Dawn and Ojibway is not commercially available and cannot defer the incremental capacity need for the winter of 2024/2025 to 2028/2029 period.[81]

Enbridge Gas also considered trucking CNG to supply natural gas to Panhandle system customers. The OEB accepts that trucking CNG is not a viable alternative because of the complexity of delivering more than 400 truckloads per day and the requirement for additional infrastructure construction.

Demand-side Alternatives

The OEB finds that the magnitude of the forecast near-term shortfall means that addressing this shortfall through demand-side alternatives is not achievable.

The forecast shortfall (156 TJ/day by winter of 2028/2029) on the Panhandle system that will be addressed by the Project is 22% of current demand on the system (698 TJ/day in winter of 2022/2023) and more than 50% of the current demand from general service customers (306 TJ/day).[82]

Enbridge Gas considered three demand-side alternatives: ETEE, interruptible rates and electrification/alternative energy sources.

Enhanced Targeted Energy Efficiency (ETEE)

Enbridge Gas retained Posterity to conduct assessments of the potential peak demand reduction that could be provided by ETEE as an IRP alternative. The OEB accepts the

[80] OEB staff Submission, page 29
[81] Enbridge Gas, Argument- in-Chief, pages 22-24, paragraphs 57-63
[82] Exhibit B, Tab 2, Schedule 1, page 11, Tables 2 and 3, June 16, 2023

conclusion of Enbridge Gas that ETEE is not technically viable, as it cannot meet the full capacity required by the Project.

More specifically, the OEB agrees with Enbridge Gas that the large amount of demand reduction that would be required to avoid the Project, including the significant amount of demand reduction that would be required as soon as the winter of 2024/2025, means that ETEE is not a technically viable alternative to address the need.

Interruptible Rates

The OEB finds that Enbridge Gas has adequately considered interruptible rates by gauging customer interest through the EOI and adjusting its demand forecast by removing all demand associated with bids in the EOI from customers that showed any interest in interruptible rates. There is no evidence to suggest that the actual demand reduction from interruptible rates would likely be greater than the adjustment Enbridge Gas has made to its forecast.

Electrification/Alternative Energy Sources

The OEB finds that there are no immediate electrification or alternative energy sources that would meet the forecasted demand that the Project is intended to supply.

The OEB notes that even in the scenario that Enbridge Gas's forecasting assumptions underestimate the pace of electrification and its effect on demand, more than 50% of the incremental capacity created by the Project is expected to serve natural gas-fired power generators, which have limited viable economic options except for service from Enbridge Gas.

Similarly for the greenhouse sector, the evidence provided by Dr. McDiarmid and Dr. Petro shows there are significant challenges regarding the technical viability and economic feasibility for using electricity in the form of ground source (geothermal) or air source heat pumps in the greenhouse sector.[83]

There is no evidence that these electricity-based technologies are currently being used in any commercial greenhouse operations in Ontario. Additionally, there is no evidence that the use of biomass as a fuel source is economically viable and reliable as a primary source for heating and CO_2, and no evidence that it is currently being used as the

[83] OGVG, Evidence of Dr. Petro, pages 2-3; Hybrid Hearing Transcript Vol. 1, pages 77-78, November 6, 2023

primary source for heating and CO_2 in any commercial greenhouse operation in Ontario.[84]

Future Pipeline Expansions in the Panhandle Region

Enbridge Gas has already signaled the potential need for another phase of expansion to meet future growth in the Panhandle region.[85] OEB staff and OGVG noted that, given the lead time required for IRP solutions (particularly demand-side solutions), planning for meeting the capacity requirements in 2029/30 should be underway now.

Environmental Defence also recommended that Enbridge Gas conduct its analysis of IRP alternatives much farther in advance of a proposed pipeline project, noting the gap in this case between the identification of need and the assessment of energy savings potential, and commenting that the late analysis makes it extremely difficult to change course.

OGVG suggested that the forecast growth in the Panhandle region may warrant immediate consideration for extensive and prolonged IRP related activity to offset the projected growth in contract demand and, hopefully, obviate the need for further transmission reinforcements in the region.

OEB staff submitted that the OEB should direct Enbridge Gas to assess whether it recommends a proactive IRP Plan, including the use of ETEE, to avoid or reduce the scope of future transmission expansion of the Panhandle system. OEB staff recommended that this assessment should be filed as part of a future Enbridge Gas annual IRP report (which already requires Enbridge Gas to report more generally on the results of its IRP Assessment Process).

In its reply argument, Enbridge Gas submitted that it was taking an “assess and adapt” approach to IRP, which strikes a prudent balance between proactive analysis, planning, and maintaining the requisite level of flexibility. Enbridge Gas submitted that changing this approach risked incurring costs that may end up being not necessary or helpful to address the future needs.

Enbridge Gas agreed that timelines for making final determinations of any IRP alternative should factor in the longer lead-times associated with ETEE programs. Enbridge Gas indicated that, based on the findings of the Posterity study, there is still

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[84] Hybrid Hearing Transcript, Vol. 3, page 140, lines 25-29 and page 141, lines 1-20
[85] Exhibit B, Tab 1, Schedule 1, page 22, June 16, 2023

time for further consideration of IRP alternatives without resulting in any lost IRP alternative opportunities at this time.[86] Enbridge Gas submitted that this affords time to gain greater certainty regarding the timing and nature of the potential future shortfall and the availability and price of the potential alternatives (including both demand and supply-side alternatives).

Enbridge Gas submitted that it was not necessary for the OEB to direct Enbridge Gas to assess whether it recommends a proactive IRP Plan for subsequent phases of Panhandle system expansion because Enbridge Gas is already in the process of completing an IRP assessment using information pertaining to the potential next phase of Panhandle system expansion as identified in its October 31, 2023 addendum to its Asset Management Plan,[87] including consideration of any trade-offs as to the appropriate time to act to address an identified system need, and any updates to this assessment, and all other IRP assessments, would be included in a subsequent IRP annual report.

Decision on Future Pipeline Expansions (Commissioners Dodds and Sword):

The OEB notes that Enbridge Gas has already signaled the potential need for another phase of expansion to meet future growth in the Panhandle region.

Enbridge Gas indicated that it will consider IRP alternatives to reduce, avoid or defer the potential need for expansion of the Panhandle system in the future. OEB staff and intervenors raised concerns with the approach described by Enbridge Gas at the oral hearing whereby Enbridge Gas stated that it would not make a determination on the best option until closer to the required in-service date when the need has been confirmed. Some parties suggested that the OEB should direct Enbridge Gas to assess whether it recommends a proactive IRP Plan, including the use of ETEE, to avoid or reduce the scope of future expansion of the Panhandle system.

Based on Enbridge Gas's reply submission,[88] the OEB finds that it is not necessary for the OEB to direct Enbridge Gas to assess whether it recommends a proactive IRP Plan

[86] The projected capacity shortfall is 17 TJ/day in winter 2030/2031 (six years), whereas the Posterity analysis found that an IRP ETEE alternative could potentially reduce peak demand by 28 TJ/day within 3.5 years.
[87] EB-2020-0091, Enbridge Gas Asset Management Plan Addendum -2024 (cell 1317). A future Panhandle system expansion project is identified with a potential in-service date of 2031 and a cost of $95 million, October 31, 2023.
[88] Enbridge Gas Reply Submission, pages 71-76.

for potential subsequent phases of Panhandle system expansion for the following reasons:

- Enbridge Gas is already in the process of completing an IRP assessment using information pertaining to the potential next phase of Panhandle system expansion which will include consideration of any trade-offs as to the appropriate time to act to address an identified system need, and any updates to this assessment, and all other IRP assessments, which will be included in the IRP annual report.
- Enbridge Gas agrees that timelines for making final determinations of any IRP alternative should factor in the longer lead-times associated with ETEE programs.
- Enbridge Gas indicates that, based on the findings of the Posterity study, there is still time for further consideration of IRP alternatives without resulting in any lost IRP alternative opportunities at this time.[89]

The OEB agrees with Enbridge Gas that this approach affords time to gain greater certainty regarding the timing and nature of the potential future shortfall and the availability and price of the potential alternatives (including both demand and supply-side alternatives).

Additionally, the OEB finds that changing the approach and timing whereby Enbridge Gas is to complete an IRP assessment and potentially implement an IRP Plan at an earlier date could result in Enbridge Gas incurring costs that may end up being not necessary, or helpful, to address the future needs.[90] The OEB expects Enbridge Gas to strike a prudent balance between proactive analysis, planning, and maintaining the requisite level of flexibility.

The OEB is not establishing requirements (beyond the existing guidance in the IRP Framework) regarding the specific IRP Alternatives that must be considered by Enbridge Gas as part of an IRP Plan with regards to a future Panhandle system expansion.

[89] In Enbridge Gas's reply submission at paragraph 185, page 75, Enbridge Gas noted that the projected capacity shortfall is 17 TJ/day in winter 2030/2031 (six years), whereas the Posterity analysis found that an IRP ETEE alternative could potentially reduce peak demand by 28 TJ/day within 3.5 years.
[90] Enbridge Gas Reply Submission, pages 74-76.

The OEB agrees with Enbridge Gas that it is not required to consider funding electrification alternatives under the IRP Framework. In the IRP Framework, the OEB determined that it is not appropriate to provide funding to Enbridge Gas for electricity IRPAs.[91]

Some intervenors and OEB staff submitted that the potential role of ETEE for contract customers, including greenhouse customers, should be given more consideration by Enbridge Gas,[92] and that this consideration should include a requirement for Enbridge Gas to proactively engage these customers to identify potential energy efficiency opportunities.[93]

The OEB does not find the need to mandate such a requirement in this Decision. In the OEB's view, contract customers are sophisticated energy consumers, many of whom are already actively engaged in Enbridge Gas's DSM program.

[91] EB-2020-0091, Decision and Order, page 35, July 22, 2021
[92] OEB staff's comments on this topic were in reference to consideration of IRP alternatives for a potential future phase of the Panhandle system expansion, not the Project.
[93] OEB staff Submission, page 32

Dissent on Future Pipeline Expansions (Commissioner Moran):

The approach by Commissioners Dodds and Sword to the issues raised relating to integrated resource planning is inconsistent with how the OEB's approach has been evolving over the almost three years since the IRP Framework decision in EB-2020-0091. To be consistent with that approach, Enbridge Gas needs to place a higher priority on proactively considering and implementing, where appropriate, alternatives that would avoid or defer the need for a subsequent Panhandle system expansion. This would include consideration of electric solutions.

In the IRP Framework proceeding, Enbridge Gas sought to include electric solutions as part of its proposed approach to integrated resource planning. In its decision, the OEB said:

> Enbridge Gas also proposed non-gas IRPAs, specifically electricity-based alternatives. The OEB has concluded that as part of this first-generation IRP Framework, it is not appropriate to provide funding to Enbridge Gas for electricity IRPAs. This may be an element of IRP that will evolve as energy planning evolves, and as experience is gained with the IRP Framework. Enbridge Gas can also seek opportunities to work with the IESO or local electricity distributors to facilitate electricity-based energy solutions to address a system need/constraint, as an alternative to IRPAs or facility projects undertaken by Enbridge Gas. However, the OEB is not establishing this as a requirement for Enbridge Gas.[94]

It is important to note that the OEB did not say Enbridge Gas could not pursue electricity-based solutions, just that "it is not appropriate to provide funding to Enbridge Gas for electricity IRPAs" at this time. Nothing prevents Enbridge Gas from applying for approval to propose to recover the cost of making its own investments to earn a return or provide on-bill financing to customers to implement electric solutions. Regardless, ratepayers are now funding incentives for electric solutions in the current residential DSM program being delivered by Enbridge Gas.

Under the IRP Framework, integrated resource planning largely boils down to system optimization and demand side management as the primary tools for deferring or avoiding the need for new infrastructure. Since the IRP Framework decision, the OEB has approved a demand side management program delivered by Enbridge Gas for the years 2023-2025. The residential component of the program provides incentives for

[94] EB-2020-0091, Enbridge Gas Integrated Resource Plan Proposal, Decision and Order, page 35, July 22, 2021

electric solutions, an example of an evolving approach to the role of electric solutions.[95] Furthermore, the OEB has signaled that Enbridge Gas should be reconsidering its approach to alternatives to gas infrastructure. In the Enbridge Gas rebasing decision, the OEB stated:

> In Phase 2 of this proceeding, a key issue regarding Enbridge Gas's incentive ratemaking mechanism proposal is to determine how performance-based incentives could be used in the face of the energy transition. Phase 2 will provide an opportunity to examine ways in which Enbridge Gas could be provided with an incentive to implement economic alternatives to gas infrastructure replacement projects, including asset life extensions and system pruning, including replacing gas equipment with electric equipment. For the recovery of the cost of economic alternatives to gas infrastructure, how should the expense be treated for rate making purposes – expensed or capitalized? How should the cost be recovered – from all remaining ratepayers, or from the benefiting ratepayers who are exiting the gas system, or some combination? What form should incentives take – a ratepayer funded incentive payment or a return on the expenditure? An examination of these questions in Phase 2 will also assist the OEB in developing direction prior to the next rebasing application.[96]

This will be addressed in Phase 2 of Enbridge Gas's rebasing application[97].

Given the size of the Project and the planning approach used by Enbridge Gas, where Enbridge Gas was only looking at alternatives based on a need identified relatively close to the required in-service date, it is not surprising that there are no alternatives technically capable of deferring or avoiding the need for the Project. For example, Posterity's analysis of ETEE potential assumed that ETEE would begin being implemented in 2023[98], and given the long lead time required to implement and achieve the full potential, this would not be sufficient to meet the capacity needed by winter 2024/25, and therefore not a viable alternative to the Project.

As OEB staff stated in its submission:

> However, Enbridge Gas has already signaled the potential need for another phase of expansion to meet future growth in the Panhandle service area.

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95 EB-2021-0002, Decision and Order, page 25, November 15, 2022. Due to federal program changes, the funding from Natural Resources Canada is not currently available to new applicants.
96 EB-2022-0200, Decision and Order, page 52, December 21, 2023
97 EB-2024-0111
98 Exhibit I.ED.7

> Enbridge Gas indicated it will consider IRP alternatives to reduce, avoid or defer the potential second phase of transmission expansion. OEB staff has concerns with the approach described by Enbridge Gas at the oral hearing. First, OEB staff questions Enbridge Gas statements that its initial assessment of IRP alternatives had not found any technically viable alternatives for this second phase, even though the forecast level of incremental growth, at least at this time, is lower than in the first phase, being 14 TJ/day in each of 2028/2029 and 2029/2030. Second, OEB staff takes issue with Enbridge Gas's statement that it would not make a determination on the best option until closer to the required in-service date when the need has been confirmed. It is likely that this approach would lead to the potential role of ETEE (for general service or contract customers) as an IRP alternative again being rejected due to the longer lead time needed for ETEE to deliver results. OEB staff submits that this wait and see approach is inconsistent with the intent of the IRP Framework to identify potential system needs/constraints well in advance to ensure adequate lead time for a detailed consideration of alternatives.[99]

This is a valid concern. Integrated resource planning, at its heart, is based on the concept of optimizing the efficiency of the existing system, and pursuing DSM on an ongoing basis, to ensure that new infrastructure is not built until it is truly needed. It is intended to be a shield that protects both the utility and the ratepayers against the implementation of new infrastructure that could be deferred or avoided. It is not intended to be a sword to be used to avoid implementation of potentially viable alternatives to new infrastructure, by waiting until it is too late to consider long timeline alternatives.

Enbridge Gas waited until the need for new infrastructure emerged before looking at alternatives that, if implemented earlier, or on an ongoing basis, could have delayed or eliminated the need for the new infrastructure. This wait and see approach, especially in the face of the energy transition, increases the risk of an overbuilt system that increases cost for ratepayers unnecessarily. It is more akin to disjointed resource planning than integrated resource planning.

In this proceeding, Enbridge Gas's witness, Ms. Wade, spoke to "the immense amount of energy efficiency that we believe would be happening also within the province"[100] in answering a question related to the cost of hydrogen to replace natural gas, but it

[99] OEB staff Submission, pages 31-32
[100] Hybrid Hearing Transcripts, Vol. 3, page 111

appears that this “immense amount of energy efficiency” does not amount to an available alternative to the Project, nor has Enbridge Gas provided any insight as to how “the immense amount of energy efficiency” is going to be achieved. The reference to “immense amount[s] of energy efficiency” highlights the longer term risk of an overbuilt system that Enbridge Gas has failed to consider, both in this proceeding and in its 2024 rebasing proceeding.[101] This is why the wait and see approach does not work.

Enbridge Gas stated that it would be necessary to move more than 50% of its general service customers off the Panhandle system to free up the capacity to be delivered by the Project, and time would not permit this, given the timing of the need for the Project. This again demonstrates that the longer timeline needed for targeted energy efficiency or electricity-based solutions needs to be taken into account earlier when considering the possibility of future expansion of the Panhandle system that Enbridge Gas is already thinking about.

Enbridge Gas needs to place a higher priority on considering and implementing, where appropriate, alternatives that would avoid or defer the need for a subsequent Panhandle system expansion.

For a discrete system like the Panhandle system, ETEE for any Enbridge Gas customers within the area of need served by the system can reduce peak demand and potentially contribute to avoiding or deferring a future facility reinforcement project to address this need. ETEE (particularly broad-based ETEE targeting general service customers) is generally seen to have a longer lead time, as only a certain percentage of customers will participate in a given year (in comparison with other alternatives such as a demand reduction negotiated with a single large customer).

Enbridge Gas stated it would file any updates to its IRP assessment of the next phase of the Panhandle system expansion, and all other IRP assessments, in its IRP annual report. It will be important to understand the complete IRP assessment for the next phase of the Panhandle system expansion project, as part of Enbridge Gas’s next annual IRP report, given the stand alone nature of the Panhandle system.
As part of its assessment, Enbridge Gas should build on the learnings from this proceeding and give further consideration to potential IRP alternatives, and combinations of those alternatives, including:

[101] EB-2022-0200

- Enhanced energy efficiency targeted at the Panhandle system as a whole, including consideration of potential enhancements to energy efficiency programs for the greenhouse sector, including contract customers, to reduce peak demand
- Supply-side solutions, including the potential for increased firm deliveries at Ojibway
- Electricity-based energy solutions to reduce demand from existing and potential new general service customers. As a preliminary step, Enbridge Gas is encouraged to work with electricity distributors and the IESO to better understand their expectations for electrification in the region, and whether electricity system constraints pose a barrier to targeted electrification efforts.

It will also be important to consider the current length of the contracts underpinning the Project and assess the likelihood of whether those contracts will be renewed or extended, in the context of considering a future expansion of the Panhandle system.

This is consistent with the OEB's direction requiring Enbridge Gas to provide:

> an Asset Management Plan that provides clear linkages between capital spending and energy transition risk. The Asset Management Plan should address scenarios associated with the risk of under-utilized or stranded assets and identify mitigating measures.[102]

[102] EB-2022-0200, Decision and Order, page 140, December 21, 2023

3.3 Project Costs and Economics

3.3.1 Project Costs

The construction of the Project is divided into two phases. The first phase, which was planned to start in Q1 of 2024, involves: (i) construction of the Panhandle Loop; (ii) modifications to the Panhandle Take-Off Station and Dover Transmission Station; and (iii) construction of the new Richardson Valve Site Station. The second phase, which was planned to start in Q2 of 2025, involves upgrades to the Dawn Yard.

The current estimated cost of the Project is $358.0 million.[103] The Project costs by category are set out in Table 6 below.

Table 6
Project Costs ($ Millions)

		NPS 36				
Item No.	Cost Description	Mainline	Stations	Subtotal	Dawn	Total
1	Materials	$ 28.3	$ 2.2	$ 30.5	$ 26.4	$ 57.0
2	Labour	2.7	0.2	2.8	0.9	3.8
3	External Permitting and Land	17.4	-	17.4	-	17.4
4	Outside Services	130.8	5.4	136.2	42.0	178.1
5	Contingency	13.9	0.6	14.5	6.3	20.8
6	Interest During Construction	6.4	0.3	6.7	5.4	12.1
7	Total Direct Capital Cost	199.5	8.6	208.1	81.1	289.2
8	Indirect Overheads	48.0	2.1	50.1	18.7	68.8
9	Total Project Cost	$ 247.5	$ 10.7	$ 258.2	$ 99.8	$ 358.0

Enbridge Gas noted that the Project costs are based upon a class 3 estimate, under the American Association of Cost Engineers, prepared in Q1 2023, updated to reflect market conditions based on Q4 2022 contractor responses to a Request for Proposal (RFP).[104]

Enbridge Gas compared the cost estimate for the Project with the cost estimate for the Dawn to Corunna project, which was recently approved by the OEB.[105] Construction of

[103] Exhibit E, Tab 1, Schedule 1, page 1, and Schedule 2: Panhandle Regional Expansion Project Cost, June 16, 2023
[104] Exhibit E, Tab 1, Schedule 1, page 1, paragraph 2, June 16, 2023
[105] Exhibit E, Tab 1, Schedule 1, page 2, Table 1: Project Cost Comparison – Pipeline Costs, June 16, 2023

the Dawn to Corunna project started in June 2023. Enbridge Gas notified the OEB on November 21, 2023, that the Dawn to Corunna project was to be in-service by November 30, 2023.[106] Although the construction has been completed, the actual final cost of the Dawn to Corunna project have not been reported to the OEB at this time. The estimated Project costs compared against the most recent forecast costs for the Dawn to Corunna project are set out in Table 7 below.

Table 7
Project Cost Comparison

Item No.	**Description**	**(a) Proposed Project** Panhandle Loop (EB-2022-0157)	**(b) Current Forecast** Dawn to Corunna (EB-2022-0086)	**(c) = (a)-(b) Variance**
	Pipeline Diameter	***NPS 36***	***NPS 36***	
	Length	***19 km***	***20 km***	
	Pipeline Material	***Steel***	***Steel***	
1	Materials	28.3	26.1	2.2
2	Labour	150.8	123.1	27.7
3	Contingency	13.9	2.6	11.3
4	Interest During	6.4	3.7	2.7
5	**Total Direct Capital Cost**	**199.5**	**155.5**	**44.0**
6	Indirect Overheads	48.0	33.4	14.6
7	**Total Project Cost**	**247.5**	**188.9**	**58.6**
8	Total Cost per km	13.0	9.4	3.6
9	Material Cost per km	1.5	1.3	0.2
10	Labour, External permitting and land, and Outside Services per km	7.9	6.2	1.7
11	**Total Ancillary Facilities Direct Capital Cost**	**89.7**	**127.1**	**(37.4)**
12	Ancillary Facilities Indirect Overheads	20.8	23.3	(2.5)
13	**Total Ancillary Facilities Project Cost**	**110.5**	**150.4**	**(39.9)**
14	**Total Project Cost (Mainline and Ancillary Facilities) $ Millions**	**358.0**	**339.3**	**18.7**

[106] EB-2022-0086, Enbridge Gas Letter to the OEB, In-service date of the Dawn to Corunna Project, November 21, 2023

Notes:
1. The proposed Project mainline estimate is inclusive of the Richardson Sideroad end point valve site.
2. The proposed Project has a more complex mainline scope with eight (8) trenchless crossings compared to one (1) trenchless crossing for the Dawn to Corunna Replacement Project.
3. Reduced contingency for the Dawn to Corunna Replacement Project due to its current stage of development/execution.

Enbridge Gas highlighted three primary reasons for the variance in cost between the two projects: (i) the construction of the Richardson Valve Site Station; (ii) the Project's mainline is more complex with seven more trenchless crossings than Dawn to Corunna; and (iii) a reduced contingency for Dawn to Corunna given the later stage of development. These three differences account for $37.3 million of the $44.0 million difference in total direct capital cost estimates between the two projects.[107]

In its initial application filed in June 2022, Enbridge Gas estimated the cost of the Project (that initially included 12 km of NPS 16 pipeline (Leamington Interconnect), which was eliminated in the application update) to be $246.6 million, which has now increased to $358.0 million.[108] Enbridge Gas attributed the variances between that amount and the current estimate to: (i) bid to estimate variance; (ii) unforeseen inflation; and (iii) scope refinement. In particular, after the filing of its initial application, Enbridge Gas conducted a RFP inviting seven proponents to bid. Six proponents submitted bids on the RFP. The average proposal price from the "three most competitive proponents" was used in calculating the current $358.0 million cost estimate. In response to an undertaking, Enbridge Gas filed, on a confidential basis, an itemized capital cost estimate for the Project based on the lowest cost bid submitted by one of the three most competitive proponents. Enbridge Gas emphasized that all three proponents were qualified in terms of their technical expertise and the price is not the only determining factor in selecting the proponent and awarding the construction contract.[109]

Position of Parties on Project Costs

OEB staff submitted that the estimated capital cost for the Project is reasonable, subject to two modifications discussed below, and largely in line with the estimate for the Dawn to Corunna project. The first modification suggested by OEB staff was that the cost

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[107] Enbridge Gas quantified: (i) the direct capital cost of the Richardson valve site station at $10.0 million (see Undertaking response Exhibit J3.1); (ii) the incremental cost of the additional trenchless crossings at $16.0 million (see Undertaking response Exhibit J3.2); and (iii) contingency difference at $11.3 million (see Exhibit E, Schedule 1, Tab 1, page 2, June 16, 2023)
[108] Exhibit I.SEC.2 a), page 2
[109] Exhibit E, Schedule 1, Tab 1, June 16, 2023; Exhibit I.SEC.1; Undertaking response Exhibit J3.3; Undertaking response Exhibit J3.4

estimate to be used for ratemaking purposes (assuming the final costs are not known and considered by the OEB before the costs begin to be recovered in rates) and by which the final construction cost should be compared is the cost estimate using the lowest cost qualified proponent. OEB staff submitted that a cost estimate based on the average bid of the three most qualified proponents provides for an additional, and unnecessary, contingency on top of the contingency already allocated to the Project.

Enbridge Gas submitted that OEB staff's approach would incentivize Enbridge Gas to select the least expensive proponent without regard to whether the proposal in question results in the most prudent expenditure of ratepayer funds. Enbridge Gas noted that this approach would neglect the complex assessment of other critical considerations used to determine the proposal that is the most competitive, and therefore the proposal that is most prudent and in the public interest. Enbridge Gas further submitted that estimating a project's cost based on the lowest proposal price is not compatible with the collaborative and iterative process inherent with RFPs and therefore is not a suitable methodology for procurements by way of an RFP process.

SEC submitted that the $358 million estimated Project cost is based on a cost estimate primarily driven by a RFP Enbridge Gas undertook over a year ago and therefore, the cost estimate is highly uncertain and could end up being materially higher.

Pollution Probe submitted that the $358 million estimated Project cost is subject to change and is based on non-binding estimated that is over a year old. Pollution Probe submitted that given the increase in the cost estimate relative to the original estimate, there is a high level of risk that ratepayers could incur costs exceeding $358 million.

Enbridge Gas submitted that it is not expected to predict the Project costs with absolute certainty and that the evidence does not demonstrate that there is an unacceptable level of uncertainty in its cost estimate. Enbridge Gas submitted that RFPs are not binding by design to allow for collaboration and iterative refinement of details at the expense of earlier contractual certainty and to mitigate the risk associated with entering into contract prematurely.

The second modification suggested by OEB staff was that any decision in Enbridge Gas's 2024 rebasing proceeding[110], which changes how overheads are capitalized, should be applied to the overheads estimated for the Project. Enbridge Gas agreed with

[110] EB-2022-0200

OEB staff and noted that it will update the indirect overhead allocations consistent with the OEB’s 2024 rebasing decision.

Energy Probe submitted that the $25.6 million increase in indirect overhead costs allocated to the Project is unreasonable and the OEB should reduce indirect overheads from $68.8 million to $43.2 million, the amount proposed in the original application. Enbridge Gas submitted that this would be inconsistent with the OEB-approved methodology for indirect overheads and the allocation of indirect overhead costs to capital projects.

Pollution Probe submitted that if the OEB grants leave to construct and determines that CIAC payments should be required, the OEB could decide to apply the Project costs without indirect overheard contributions. Pollution Probe submitted that with this approach, the $68.8 million in indirect overheads would need to be removed from Enbridge Gas’s rebasing capital envelope to avoid cross-subsidization of those costs from general rate payers.

Decision on Project Cost (Commissioners Moran, Dodds and Sword):

The OEB finds that the estimated capital cost of $358 million for the Project is reasonable.

The OEB does not agree with OEB staff’s position that the cost estimate to be used for ratemaking purposes should be based on the lowest cost qualified proponent. Out of six proponents that submitted bids on the RFP, Enbridge Gas selected the average proposal price from the “three most competitive proponents” to calculate the $358 million cost estimate.

The OEB considers that this process narrows the range of price variations within a class 3 cost estimate and supports the use of an average price for the estimated capital cost.

The OEB also recognizes that price is not the only determining factor in awarding the construction contract since other critical considerations need to be factored into the selection, which can affect both the final cost and the prudence of the contracting decision.

The OEB finds that the $25.6 million increase from the original application in indirect overheads allocated to the Project is consistent with the current OEB-approved methodology for indirect overheads and the allocation of indirect overhead costs to projects.

The OEB notes that Enbridge Gas agreed with OEB staff that it will update the indirect overhead allocations consistent with the OEB's Decision and Order with respect to Enbridge Gas's 2024 rebasing application. In Enbridge Gas's 2024 rebasing proceeding, the OEB determined that Enbridge Gas should no longer be capitalizing indirect overheads.[111] When Enbridge Gas applies for a rate to recover the cost of the Project, it will need to address the treatment of indirect overheads.

The OEB also notes that in its Decision and Order regarding Enbridge Gas's 2024 rebasing application, Enbridge Gas has been directed to file, in its next rebasing application, an independent third-party expert study that assesses its overhead capitalization methodology.[112]

3.3.2 Project Economics

The following sub-sections summarize Enbridge Gas's evidence and the position of parties with respect to the economic assessment of the Project, including Enbridge Gas's E.B.O. 134 economic assessment, the appropriate methodology to assess the economic feasibility of the Project, and the appropriateness of requiring capital contributions from contract customers that are driving the need for the Project.

<u>Enbridge Gas's E.B.O. 134 Economic Assessment</u>[113]

The total estimated cost of the Project is $358.0 million. Enbridge Gas defined the Project as a transmission system expansion and applied the three-stage economic test set out in E.B.O. 134 (E.B.O. 134 test) to evaluate Project economics.[114] The results of the E.B.O. 134 test as conducted by Enbridge Gas are set out in Table 8 below.[115]

[111] EB-2022-0200, Decision and Order, page 98, December 21, 2023
[112] EB-2022-0200, Decision and Order, page 141, item 9 (e), December 21, 2023
[113] Exhibit E, Tab 1, Schedule 1, June 16, 2023
[114] Exhibit E, Tab 1, Schedule 1, page 7, paragraph 24, June 16, 2023
[115] Exhibit E, Tab 1, Schedule 1, page 7, June 16, 2023

Table 8
E.B.O. 134 Test Results as Conducted by Enbridge Gas

Stage	Net Present Value ($millions)
1	($150)
2	$226 (20-year revenue horizon) to $353 (40-year horizon)
3	$257
Total	$333 (20-year revenue horizon) to $460 (40-year revenue horizon)

Enbridge Gas stated that the Project is in the public interest and is economically feasible as the result of the E.B.O. 134 test is a net present value (NPV) benefit in the range of $333 million to $460 million.

E.B.O. 134 - Stage 1 Test

In Stage 1 of the E.B.O. 134 test, Enbridge Gas conducted a Project-specific Discounted Cash Flow (DCF) analysis. The 40-year DCF resulted in a $150 million revenue shortfall. The main indicator resulting from the DCF in Stage 1 is a Profitability Index (PI). The PI is calculated by dividing the NPV of the cash inflows by NPV of cash outflows. The PI for the Project is 0.48 which implies that the Project is not economic (less than 1.0) at Stage 1 of the analysis.

The revenue horizon that Enbridge Gas used for the Stage 1 analysis was 40 years. Enbridge Gas also provided a Stage 1 DCF analysis using a 20-year revenue horizon, which would result in an $174 million shortfall and a PI of 0.39.[116]

Position of Parties – E.B.O. 134 – Stage 1 Test

Several parties (Energy Probe, Environmental Defence, OEB staff, Three Fires Group) argued that the use of a 20-year revenue horizon was more appropriate. These submissions noted that the E.B.O. 188 test used for distribution expansion projects requires the use of a 20-year revenue horizon for large volume customers, to mitigate the risk that demand from these customers may not persist for 40 years. As 94% of the

[116] Exhibit I.EP.15

demand that will be served by the Project is related to specific large volume customers, these parties were of the view that a similar demand risk exists for the Project.

Enbridge Gas disagreed, submitting that because the Project is a transmission facility, the risk of demand reduction is lower than it would be for a distribution project. Spare capacity could be reallocated to any customer served by the Panhandle system, and thus the revenue horizon should not be tied to the particular risk of reduced demand from a specific connecting customer. Therefore, Enbridge Gas submitted that a 40-year revenue horizon should apply, but even with a 20-year revenue horizon, the Project remained economically feasible, when considering the results of all three stages of the E.B.O .134 test.[117]

Environmental Defence acknowledged that the revenue risk associated with reduced demand or disconnections may be less for a transmission project than a distribution project, but stated that this is outweighed by the fact that almost all the incremental demand is from only two sectors (gas-fired electricity generation and greenhouses), both of which are highly carbon intensive and highly vulnerable to the energy transition.[118]

Conversely, OGVG submitted that the long-term economic health of Enbridge Gas's system may depend on large volume customers, such as greenhouses, who are less likely to fully electrify and exit the gas system. OGVG submitted that there is a benefit (not accounted for in Enbridge Gas's Stage 1 analysis) in adding this new load from large volume customers, as it may reduce potential rate increases for other remaining Enbridge Gas customers that would otherwise occur as a result of the energy transition, due to the need to recover fixed system costs over a declining customer load base.[119]

There were few other comments on the methodology for Stage 1. OGVG submitted that Stage 1 benefits are likely understated as, in addition to the incremental transmission revenue associated with the new load served by the Project and included by Enbridge Gas in its Stage 1 DCF analysis, there will also likely be incremental distribution and storage revenue. OGVG estimated that this could reduce the Stage 1 revenue shortfall to approximately $75 million.[120]

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[117] Enbridge Gas Reply Submission, pages 36-37
[118] Environmental Defence Submission, pages 12-13
[119] OGVG Submission, pages 11-12
[120] OGVG Submission, pages 9-11

As discussed later in this section of the Decision and Order, many parties argued that, given the identified Stage 1 revenue shortfall, capital contributions from connecting customers should be required to improve the Stage 1 results.

E.B.O. 134 - Stage 2 Test

As the PI for the Project was below 1.0, Enbridge Gas conducted the Stage 2 cost/benefit analysis in accordance with the E.B.O. 134 test. The Stage 2 analysis categorizes energy cost savings to in-franchise general service customers as benefits associated with the Project.[121] The savings were calculated based on using natural gas instead of another energy source. Enbridge Gas estimated that the energy cost savings were $226 million and $353 million for a 20-year and 40-year horizon respectively.[122]

Environmental Defence questioned Enbridge Gas's assumptions for the Stage 2 analysis under the E.B.O. 134 test and filed evidence from Dr. McDiarmid using alternative assumptions.[123] The primary difference in the assumptions between Enbridge Gas's and Dr. McDiarmid's analysis is that Enbridge Gas assumed that in the absence of access to natural gas, potential general service customers would instead use a mixture of electricity, propane, and heating oil in proportion to the current shares of household space heating energy options based on Statistics Canada data on household energy use.[124] Dr. McDiarmid, noting that the incremental general service demand that would be served by the Project is more than 95% new construction, applied the assumption that residential and commercial customers would instead choose high-efficiency electric heat pumps.[125] Under this assumption, Dr. McDiarmid concluded that customers would actually experience higher energy bills were they to use natural gas instead of heat pumps, and that the Stage 2 results for the Project would be negative.

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[121] Enbridge Gas did not include energy cost savings for contract customers in the Stage 2 analysis, indicating that these customers will not choose an alternative fuel if natural gas is not available to them, but would instead expand or move their operations to other jurisdictions, likely outside of Ontario, where their natural gas needs can be served; Exhibit E, Tab 1, Schedule 2, page 5, June 16, 2023
[122] Exhibit E, Tab 1, Schedule 1, pages 4-5, June 16, 2023
[123] Environmental Defence Intervenor Evidence, prepared by McDiarmid Climate
Consulting: Evidence Regarding Stage 2 Analysis and Gas Alternatives for Greenhouses, updated October 18, 2023
[124] Exhibit I.STAFF 15 (c); Enbridge Gas's calculations also assumed that electric heating would be resistance heating, rather than higher-efficiency heat pumps.
[125] Dr. McDiarmid's evidence did not change Enbridge Gas's assumptions regarding the alternatives for industrial buildings, noting that, in these cases, fuels may be used for applications where heat pumps may not be suitable.

Enbridge Gas cited its 2021 Residential Single Family End Use Study results, showing that 77% of customers prefer natural gas for home heating in a new home, to support its analysis that general service customers would see benefits from access to natural gas for heating, and also disagreed with some aspects of Dr. McDiarmid's methodology and input assumptions.[126]

In particular, Enbridge Gas argued that the cost-effectiveness of electric heat pumps relative to natural gas heating from the customer's perspective is sensitive to the assumptions around future electricity and carbon prices.[127] Enbridge Gas noted that Dr. McDiarmid's evidence assumed that electricity prices will remain constant at current rates, despite the likelihood that there will be significant costs associated with upgrading electricity infrastructure to support the energy transition.

Enbridge Gas further noted that there are public policy risks regarding the carbon pricing assumptions used in Dr. McDiarmid's model (which assumes a continued increase in the Federal Carbon Charge until 2030, remaining constant thereafter, reflecting current federal law). Enbridge Gas noted that changing the carbon pricing assumption to hold the Federal Carbon Charge constant at 2023 levels affects the modeling results significantly, reducing the net benefit of heat pumps relative to natural gas heating from a net benefit of $4,012 (per customer) to a net cost of $128 (i.e., gas heating becomes more cost-effective than heat pumps). If the Federal Carbon Charge is assumed to be removed entirely, then Dr. McDiarmid's model calculates heat pumps to have a net cost of $3,516 (per customer) relative to gas furnaces.[128]

Position of Parties – E.B.O. 134 – Stage 2 Test

OEB staff and several intervenors (Environmental Defence, Energy Probe, SEC) submitted that the Stage 2 benefits were significantly overstated. Each of these submissions agreed with the general premise of Dr. McDiarmid's evidence that Enbridge Gas's assumptions around customer heating choices in the absence of natural

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[126] Enbridge Gas Reply Evidence, pages 5-10, November 3, 2023
[127] Enbridge Gas Reply Submission, pages 37-39
[128] Dr. McDiarmid confirmed (Hearing Transcript Day 1, pages 100-101) that if the input assumptions in her modelling were updated as described, they would yield the results described by Enbridge Gas. However, Environmental Defence filed a letter (January 31, 2024) that disputed Enbridge Gas's wording that "Dr. McDiarmid confirmed at the hearing that the removal of the current Federal Carbon Charge would result in natural gas being more cost-effective than electric heat pumps for the average residential energy consumer, based on her analysis" (Enbridge Gas Reply Argument, page 13). Environmental Defence also argued in this letter that the changes to the carbon pricing assumptions made by Enbridge Gas were not appropriate and that Dr. McDiarmid's analysis was conservative in many assumptions, which if adjusted, would improve the cost-effectiveness of heat pumps.

gas were not realistic and should include a higher share of electric heat pumps, and that the net benefit for each new general service customer from accessing natural gas would therefore be lower than calculated by Enbridge Gas, reducing overall Stage 2 benefits.

The Stage 2 benefits as modified by parties ranged from a net benefit of $113 million (Energy Probe) to a net cost of $48 million (Dr. McDiarmid's evidence). OEB staff and Enbridge Gas submitted that it is appropriate to set a floor of zero for Stage 2 NPV benefits (rather than calculating a negative Stage 2 NPV) as potential customers may choose not to connect to the natural gas system if their energy bills would be lower by not connecting.

Enbridge Gas also provided, for illustrative purposes, a modified version of its Stage 2 analysis that accounted for the higher efficiency of electric heat pumps (relative to resistance heating) when calculating customer benefits, but did not assume 100% use of electric heat pumps as alternatives to natural gas (the alternative heating choice for some customers was assumed to be propane or heating oil).[129] Under this analysis, Enbridge Gas calculated a reduced, but still positive, Stage 2 net benefit of $79 million.

OGVG noted that Enbridge Gas's Stage 2 analysis did not calculate any Stage 2 benefits for greenhouse customers (or other contract customers) resulting from the cost differential between serving that new load using natural gas and serving that new load using electricity and other substitutes.

As discussed in the Project Need section of this Decision and Order, contract customers are expected to be the primary users of the additional capacity provided by the Project. Enbridge Gas indicated that Stage 2 benefits were not included for these customers because access to natural gas was a precondition for greenhouse expansion to occur (i.e., these customers would not simply choose a different energy source in the absence of natural gas). OGVG agreed and indicated that the impact of the Project on the viability of future greenhouse operations expansion needs to be considered under Stage 3 of the E.B.O. 134 test, discussed below.

E.B.O. 134 - Stage 3 Test

The Stage 3 analysis involved monetizing the value of other public interest considerations. More specifically, Enbridge Gas quantified the direct impacts of the Project on Gross Domestic Product (GDP) and taxes paid by the utility in Ontario.

[129] Enbridge Gas also used a 20-year revenue horizon in this calculation; Enbridge Gas Reply Evidence, pages 5-6.

Enbridge Gas estimated that economic benefits to Ontario are approximately $257 million. The economic benefit of $257 million is only related to the construction of the Project and does not include the economic benefits to Ontario when natural gas customers receiving the incremental supply invest and grow their operations. Enbridge Gas estimated that the total direct capital investment from these connecting customers would be $4.5 billion.[130]

Position of Parties – E.B.O. 134 – Stage 3 Test

OEB staff, Energy Probe and SEC raised concerns with Enbridge Gas's use of an economic multiplier of the direct capital cost of the Project as a method of calculating Stage 3 economic benefits. Energy Probe and SEC argued that any approach that calculated higher net benefits based on higher project costs is fundamentally wrong. Energy Probe stated that if Enbridge Gas's existing customers did not have to pay through rates for the construction of the Panhandle pipeline, these customers would spend that money on their own needs and investments, making this a zero-sum situation such that the appropriate amount for Stage 3 benefits is zero. SEC similarly noted that there would be negative macroeconomic impacts of customers having less money to spend and invest.

OEB staff further noted that Enbridge Gas's methodology has a bias towards capital solutions for Enbridge Gas (as opposed to OM&A solutions), as only capital spending is credited with a GDP benefit. OEB staff and Energy Probe noted that the high value of the multiplier (91% of a project's capital cost), when combined with the additive nature of the E.B.O. 134 test, means that when the three stages of the test are added together, almost any project would pass the test, regardless of the specifics of the project.

Environmental Defence submitted that Enbridge Gas's Stage 3 analysis was incomplete, including only the growth-related benefits, but not including negative impacts, including energy transition risk exposure, fossil fuel subsidies, skewed behaviour, carbon emissions, and potential economic and employment losses.[131] SEC made similar submissions.

In its reply submission, Enbridge Gas indicated that its use of the economic multiplier had been previously accepted, and that the rate impact of the Project, spread over all of Enbridge Gas's customers, would not have a material impact on disposable income. Enbridge Gas also submitted that SEC's submission conflated the concept of an

[130] Exhibit E, Tab 1, Schedule 1, pages 5-6, June 16, 2023
[131] Environmental Defence Submission, pages 9-10

economic measure with the question of whether construction costs are prudent, and that the level of the construction cost estimate should be considered separate from the method by which the multiplier effect is determined. Enbridge Gas further stated that its three-stage analysis had accounted for the potential negative consequences Environmental Defence and SEC had identified.

Despite its concerns, OEB staff noted that Enbridge Gas's Stage 3 analysis for the Project did not include the indirect economic development benefits associated with expansion of greenhouse production. Enbridge Gas qualitatively identified these benefits but did not monetize them in the Stage 3 analysis, as it did not have an accepted mechanism for doing this calculation that has been accepted by the OEB.[132]

Enbridge Gas indicated that the economic benefits of the $4.5 billion in capital spending enabled by the Project will be at least equal to if not greater than the $257 million in economic benefits it has calculated would result from the construction of the Project. OEB staff and OGVG agreed with Enbridge Gas. APPrO and Atura Power also submitted that there were additional Stage 3 benefits (not quantified in Enbridge Gas's analysis) to the electricity system that would result from the reliable supply of gas-fired electricity generation enabled by the Project.[133]

Position of Parties - Overall Interpretation of E.B.O. 134 Test Results

As discussed in the next section, parties took different positions as to whether the single-stage E.B.O. 188 test, the three-stage E.B.O. 134 test, or a modified test, is appropriate to assess the economic feasibility of the Project.

Parties also provided comments on how the E.B.O. 134 results should be considered by the OEB in its decision-making, should the OEB determine that E.B.O. 134 is the appropriate test to apply.

Consistent with its historical approach to the E.B.O. 134 test, Enbridge Gas added the results of the three stages together, which yielded a positive overall NPV for the Project, and therefore concluded that the Project is in the public interest and is economically feasible.[134] APPrO, Atura Power, OEB staff, and OGVG reached similar conclusions

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132 Hybrid Hearing Transcript, Vol. 1, pages 144-146
133 APPrO Submission, page 22
134 E.B.O. 134 does not specifically mention adding the results of each stage. It states that if a project is not acceptable because it fails the DCF Stage 1 analysis or has significant other disadvantages, then stages two and three must be completed before the project can be said to be fully evaluated.

(with OEB staff's conclusion taking account of its proposed modifications to the results of Stages 2 and 3 of the E.B.O. 134 test).

Energy Probe submitted (based on its adjustments to Stage 2 and Stage 3 results) that the sum of the three stages produced a negative NPV and therefore the Project failed the E.B.O. 134 test. Pollution Probe also submitted that the Project fails the E.B.O. 134 test when realistic assumptions are applied, although it did not specifically describe the adjustments it would make.

Environmental Defence and SEC also argued that the Project failed the test for economic feasibility, and offered further comments as to how the OEB should use the results of each stage in its decision-making. Environmental Defence submitted that while there is precedent for approving projects with negative Stage 1 results but with Stage 2 benefits, the OEB had never approved a pipeline project on the basis of Stage 3 benefits alone. SEC expressed a preference that Stage 2 and 3 results should not be considered in the economic feasibility assessment, but also submitted that, if the OEB does use the three-stage test, Phase 3 benefits cannot be valued on the same basis as the outcomes of Phase 1, or even Phase 2, given the concerns SEC raised with the Phase 3 methodology and results.

E.B.O. 134 states that it is appropriate for existing customers to subsidize, through higher rates, financially non-sustaining extensions that are in the overall public interest if the subsidy does not cause an *undue burden* (emphasis added) on any individual, group or class.[135] Energy Probe, IGUA, and SEC argued that the magnitude of the Stage 1 costs and the low PI indicated that the Project represented an undue burden on existing customers under E.B.O. 134, and argued that, should the Project be approved, CIACs should be used to reduce this burden.

Enbridge Gas submitted that, for a burden to be "undue", it must be material enough to outweigh the overall public interest determination based on the results of the three-stage E.B.O. 134 test. Enbridge Gas noted that the OEB has previously approved transmission projects with lower PIs and more negative Stage 1 results than the proposed Project, based on the overall three-stage results, without requiring CIACs.[136] OGVG and APPrO also submitted that there was no evidence of undue burden, with

[135] E.B.O. 134, section 6.79
[136] Enbridge Gas Reply Submission, pages 43-44

OGVG noting that delivery rate impacts on customers were expected to be modest, with the largest expected impact on any rate class being estimated at 5%.[137]

Applicability of the OEB-approved Economic Tests and the Requirement for a CIAC

In Procedural Order No. 4, the OEB confirmed that the issue of the applicability of the E.B.O. 134 and E.B.O. 188 economic tests is within the scope of the proceeding. The OEB stated:

> ...the OEB is of the view that the economics of the project, the applicability of EBO 134 and EBO 188, and the extent to which contributions in aid of construction should be required are issues that are in scope for this proceeding. Enbridge may wish to consider whether to provide additional evidence on those issues as part of its proposed update to its application. Enbridge may also wish to consider whether it should be communicating with potentially affected customers regarding the position of some parties that contributions in aid of construction should be required.[138]

In the updated application, filed on June 16, 2023, Enbridge Gas addressed the issue of the applicability of the E.B.O. 134 and E.B.O. 188 economics tests. Enbridge Gas stated that E.B.O. 134 is the appropriate economic test as the Project is entirely a transmission project. Enbridge Gas's evidence highlights that 94% of the capacity to be added by the Project is for large contract customers and only 6% is expected to serve the general service market. Enbridge Gas maintained its position that the Project is a transmission project and that it would benefit both contract and general service customers.

Enbridge Gas stated that a CIAC should not be required as the Project is a transmission project and the entire Panhandle region will benefit from the incremental capacity.

Enbridge Gas noted that the pipeline provides service to a large geographic area and connects to multiple distribution systems serving both contract and general service customers. Enbridge Gas also emphasized that the Project partially alleviates the largest Panhandle system bottleneck which improves reliability of service for existing customers and enables growth of demand for both existing and new customers.

[137] OGVG Submission, pages 18-19
[138] Procedural Order No. 4, page 3, December 14, 2022

Position of Parties - Applicability of E.B.O. 134 and E.B.O. 188

APPrO submitted that the E.B.O. 134 test is the proper economic test for the Project as the Project is a transmission line and no customers are directly connected. APPrO believes that if the OEB reviews the E.B.O. 134 test it should be by way of a generic hearing and no changes should be made prior to 2030 and should be phased-in to allow the changes to be considered and integrated into business forecasts and decision.[139] APPrO also noted that the Project is needed to meet both gas and electricity demand in the Panhandle region. Atura Power fully supported APPrO's position.

OEB staff submitted that, with respect to the Project purpose and classification as transmission or distribution, the Project serves a dual purpose. OEB staff stated that while there is no question that it provides transmission benefits to the Panhandle region (i.e., alleviates a Panhandle system bottleneck, which improves reliability and enables growth of demand for both existing and new customers) - the fact is that the majority of the benefit will accrue to the few contract customers that underpin the need for the Project.

OEB staff submitted that the OEB should accept Enbridge Gas's application of the E.B.O. 134 test to assess the economic feasibility of the Project. OEB staff submitted that the Project is economically justified under the E.B.O. 134 test and should be approved with no requirement for CIAC payments. OEB staff submitted that it would be preferrable to consider revisions to the E.B.O. 134 and E.B.O.188 economic tests in a generic manner after certain relevant issues (i.e., energy transition-related matters including revenue horizon) have been adjudicated in Enbridge Gas's 2024 rebasing proceeding.[140]

Several parties made arguments that the OEB is not bound by past practice in determining the appropriate approach to assessing economic feasibility in this proceeding.

SEC submitted that the OEB has the ability to depart, in whole or in part, from the E.B.O. 134 test if it believes the circumstances warrant it.[141]

Environmental Defence, Pollution Probe and Three Fires Group submitted that although the OEB should consider the applicable guidance from E.B.O. 134 (or from E.B.O. 188

[139] APPrO Submission, pages 10-12
[140] EB-2022-0200
[141] SEC Submission, pages 8-9, paragraph 34

should the OEB decide this to be a distribution project), that cannot fetter its discretion to decide whether the expansion is in the public interest under section 96 of the OEB Act. Environmental Defence submitted that the Project is not in the public interest and fails the E.B.O.134 test. [142] Pollution Probe argued that the E.B.O 188 test is the appropriate test to assess the economics of the Project.[143]

Three Fires Group noted that E.B.O. 134 itself provides flexibility for the OEB to determine what the public interest entails, referencing the following sections of E.B.O. 134:[144]

> 5.14. The Board reiterates that the concept of public interest is dynamic and must change with the circumstances. The Board considers that the relevant criteria from those listed above, and others depending on the circumstances, should be addressed as fully as possible so that the Board has complete information on which to base its determination as to whether or not a project is in the public interest.
>
> 5.15. There can be no firm criteria for determining the public interest and the Board will not attempt to define these criteria closely. The weighting the Board attaches to each criterion considered can also change with the circumstances of a specific application.[145]

Three Fires Group submitted that the Project should not be approved as it is not in the public interest and "…therefore does not pass the E.B.O. 134 test…"[146]

Energy Probe submitted that the E.B.O. 134 test is not the appropriate economic test for the Project and argued that the Project is not a transmission pipeline as it does not move natural gas on behalf of other shippers in the Province "…because its main and arguably only purpose is to provide gas to the Panhandle Market Area…".[147]

FRPO submitted that the E.B.O. 188 economic test is the appropriate test to use to assess the feasibility of the Project.

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[142] Environmental Defence Submission, pages 3-13
[143] Pollution Probe Submission, pages 20-21
[144] Three Fires Group Submission, pages 18-19
[145] E.B.O. 134, Report of the Board: Review by the OEB of the Expansion of the Natural Gas System in Ontario, lines 364-365, June 1, 1987
[146] Three Fires Group Submission, page 30, paragraph 96 (a)
[147] Energy Probe Submission, page 20

IGUA submitted that the OEB's considerations should not focus on whether the Project is to be defined as transmission or distribution as a basis to determine the appropriateness of E.B.O. 134 or E.B.O. 188, but that the OEB should consider:

a) the focus found throughout this evolution on finding ways to preclude *"undue"* rate increases for existing customers; and

b) the directions that where the use of a proposed facility will be dominated by one or more large volume customers (E.B.O. 188), CIACs are appropriate to preclude *"undue"* subsidies from existing to new customers (E.B.O. 134, paragraph 7.29).[148]

Contribution in Aid of Construction

As part of the 2023 EOI, Enbridge Gas conducted outreach to customers to obtain their views the payment of a CIAC related to the Project. Enbridge Gas asked these customers how a requirement for a CIAC may impact their demands for new/incremental service.[149] Enbridge Gas stated that the customers feedback was as follows:

- Customers submitting EOI bids for new/incremental service were bidding under the assumption that the OEB would apply the established regulatory framework for transmission system expansion projects, which does not require CIAC, consistent with similar projects constructed in the past
- Customers generally indicated opposition to being required to provide CIAC to support transmission system expansion in this instance.

According to Enbridge Gas, no customer indicated that they would be willing to provide a CIAC for a transmission system expansion project without understanding the magnitude of the contribution.

Position of Parties - Contribution in Aid of Construction

Enbridge Gas, Atura Power, APPrO, OGVG and OEB staff submitted that a requirement for CIAC payments would not be appropriate.

APPrO submitted that the E.B.O. 134 test is appropriate and that it would not be appropriate to request the payment of a CIAC. APPrO argued that requesting the

[148] IGUA Submission, page 15, paragraph 59
[149] Exhibit E, Tab 1, Schedule 1, B. Project Economics, page 3, paragraph 4, June 16, 2023

payment of a CIAC from the Panhandle contract customers would introduce regulatory uncertainty and "…that regulatory certainty is imperative to continued economic investment in the province."[150] APPrO also submitted that requesting the payment of a CIAC from the incremental customers that underpin the need for the Project would raise a question of fairness between these customers and customers who already "..have benefited from gas transmission system expansion projects…without obligation to make contributions in aid of construction."[151] APPrO argued that having to make CIAC payments would be "commercially adverse" for Brighton Beach GS and East Windsor GS, which both have electricity generation contracts with the IESO, and either already have a natural gas service contract with Enbridge Gas (Brighton Beach GS) or are negotiating with Enbridge Gas (East Windsor GS).[152] Atura Power supported APPrO's position.

OGVG opposed the imposition of a requirement for the payment of a CIAC on new customers. OGVG argued that the requirement for the payment of a CIAC would not be appropriate because the Project is in the public interest. OGVG stated that the E.B.O. 134 framework has been in effect for over 30 years and that the OEB has used it consistently to consider expansions of the transmission system based on the benefits of a project that go beyond a focus on ratepayers only. OGVG submitted that the E.B.O. 134 assessment for expansion projects is based on an overall economic assessment that considers the broader public interest.[153] OGVG argued that the transmission expansion would benefit all the existing customers and new customers in the "broad area." OGVG submitted that according to E.B.O. 134 the subsidy by existing customers through higher rates is acceptable.[154]

On that basis, OGVG submitted that there is no undue burden on any individual, group or class of customers as a result of the Project. OGVG stated that a CIAC "…may impact the ability of many greenhouse operators to finance their projects, given that they are already, typically, going to be heavily leveraged to fund the capital investment to build their operation.".[155]

[150] APPrO Submission, page 1, paragraph 4 a)
[151] APPrO Submission, page 2, paragraph 5
[152] See more on the demand and contracts between power generators and Enbridge Gas and IESO in the Project Need section of the Decision and Order.
[153] OGVG Submission, pages 18-21, paragraphs 73-83
[154] OGVG Submission, page 19, paragraph 78
[155] OGVG Submission, page 21, paragraph 83

While OEB staff did not support the requirement for the payment of a CIAC with respect to the Project, OEB staff offered an approach for the calculation of a CIAC in the scenario that the OEB does require CIAC payments from contract customers benefitting from the incremental capacity added by the Project. OEB staff noted that its suggested approach would ensure that the contract customers are responsible for paying a CIAC amount that results in those customers paying for the portion of the Project costs that they directly benefit from and are otherwise not recovered through the revenues received by Enbridge Gas through the rates charged to these customers. OEB staff noted that under this scenario the remaining Project cost is socialized amongst Enbridge Gas's customer base.[156]

Environmental Defence, Energy Probe, IGUA, FRPO, Pollution Probe, SEC and Three Fires Group argued that the contract customers who drive the majority of the demand underpinning the need for the Project's incremental capacity should pay a contribution towards the capital cost of the Project. Parties supporting the requirement for a CIAC payment, explored through interrogatories and cross-examination the issue of how a CIAC could be calculated and applied to customers connecting to the Project.

Environmental Defence stated it believes that there is no "…justification for the $150 million subsidy" and provided multiple reasons to support its position, including the "beneficiary pays" principle, fairness versus recently connected customers, and predictability. Environmental Defence addressed Enbridge Gas's argument that a capital contribution may result in unfairness because of the likely over, or under collection, of revenue from the existing customers that did not pay a capital contribution and future customers that will pay a capital contribution. Environmental Defence noted that "…although it may not be possible to achieve perfect fairness, that is no different from the lack of perfect fairness inherent in postage stamp rates that result in the same rates for customers that actually cost different amounts to serve.".[157]

Energy Probe stated that it "…believes in the user pay principle." Energy Probe argued that contract customers should pay a capital contribution using the OEB-approved Hourly Allocation Factor (HAF) methodology and should be charged a contribution that would bring the Project to a PI of 1.0 after 20 years.[158]

Pollution Probe opposed the approval of the Project but submitted that if the OEB grants the Project it should require capital contribution from all contract customers with

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[156] OEB staff Submission, pages 46-48
[157] Environmental Defence Submission, pages 13-14
[158] Energy Probe Submission, pages 23-25

demand equal or greater than 94% of the incremental capacity. Pollution Probe stated that the same CIAC treatment should be applied to any new or existing contract customers requesting incremental demand for a period of five years. Pollution Probe proposed that the CIAC be calculated and allocated in proportion to customers' forecasted incremental demand.[159]

IGUA proposed that the HAF method be used to determine capital contributions by contract customers benefitting from the Project. IGUA recognized that the HAF "…will not perfectly allocate capacity costs to capacity consuming customers…" but stated that "…this approach better match costs to benefits, in allocating to large customers an equitably and transparently derived share of the revenue shortfall associated with the project which creates the capacity that they have requested."[160] In response to Enbridge Gas's argument that the changing hydraulics of the system prevents accurate determination of capital contributions to the existing and new customers, IGUA stated that "…[g]iven the inevitably imperfect matching of costs to benefits inherent in any practical approach to rate making, the precise matching system hydraulics with allocated costs is beside the point.".[161]

FRPO submitted that the E.B.O. 188 test should be applied to the Project combined with the HAF contribution calculation and allocation methodology.

SEC proposed a four step model for determining CIAC: (1) identification of the revenue shortfall (using Stage 1 of the E.B.O 134 test); (2) allocation of shortfall between general service and contract customers; (3) calculation of the CIAC (based on forecast peak hourly demand of forecast customers to determine cost per unit of peak hourly demand); and (4) payment of CIAC by all contract customers who attach to the Panhandle system over five years.[162]

Three Fires Group submitted that should the OEB approve the Project it should require "…capital contribution to eliminate any subsidy."[163]

Enbridge Gas responded to the proposals to charge a CIAC to contract customers benefitting from the Project. Enbridge Gas stated that calculating a CIAC for a customer connecting to a transmission project is not appropriate "…and not possible under the

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[159] Pollution Probe Submission, page 6 and Appendix A: CIAC Examples, pages 25 and 26
[160] IGUA Submission, page 24, paragraphs 94-95
[161] IGUA Submission, page 21, paragraph 84
[162] SEC Submission, pages 17-18, paragraphs 74-75
[163] Three Fires Group Submission, page 31, paragraph 98 (a)

current regulatory perspective."[164] More specifically, Enbridge Gas stated that, "[t]he contribution and the methodology to calculate the contribution is in effect a rate that must be approved by the OEB as being just and reasonable. If Enbridge Gas were to provide a number (even if one could be calculated) it would be highly speculative, a departure from past practice, and would represent to customers a rate that has never been considered and is not approved by the OEB.".[165]

Decision on Project Economics (Commissioners Dodds and Sword):

The OEB finds that the Project is a transmission pipeline, based upon the characteristics of a large diameter high pressure pipeline with no direct customers, running adjacent to an existing transmission pipeline.

Given the Project is a transmission pipeline, E.B.O. 134 applies to the Project. This conclusion is consistent with the OEB's Natural Gas Facilities Handbook which states that "the test in EBO 134 is generally applicable to a project where there will be no distribution customers directly connected to the pipeline."[166]

Based on the three-stage E.B.O. 134 test, the OEB finds that the Project is economically justified with no requirement for contributions in aid of construction or CIAC.

The OEB notes that this approach is consistent with previous expansion of the Panhandle transmission system.[167]

Each stage of the E.B.O. 134 test is discussed further below.

<u>E.B.O. 134 - Stage 1 Test</u>

Enbridge Gas conducted a Project-specific DCF analysis based on a 40-year revenue horizon, which resulted in a $150 million revenue shortfall and a PI of 0.48.

Although Enbridge Gas also provided a Stage 1 DCF analysis using a 20-year revenue horizon, which would result in an $174 million shortfall and a PI of 0.39,[168] the OEB

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[164] Exhibit I.ED.29
[165] Exhibit I.ED.29 a) and b), page 2
[166] EB-2022-0081, OEB Natural Gas Facilities Handbook, page 28, citing EB-2018-0013, Decision and Order, page 4, September 20, 2018.
[167] EB-2016-0186, Decision and Order, page 22, February 23, 2017
[168] Exhibit I.EP.15

does not agree with some intervenors that the use of a 20-year revenue horizon is more appropriate. This finding is based on the following:

- the Project is a transmission facility, and the risk of demand reduction is lower than it would be for a distribution project.[169]
- excess capacity can be reallocated to any customer served by the Panhandle system.[170]

The OEB also does not accept the argument of a number of intervenors that connecting contract customers should be subjected to CIAC payments to reduce or eliminate the negative Stage 1 NPV.

All transmission expansions by their nature, have downstream demand to support expansion. In the absence of downstream demand, there would be no need for any transmission expansion to occur. However, this fact does not necessarily mean that those individual customers should be required to pay a CIAC. The Project addresses system bottlenecks, which once relieved, will improve the reliability of service for existing customers, and will allow for growth from existing and new customers.

The OEB further has concerns that departing from the typical approach of not requiring CIAC for transmission expansions raises a fairness issue for the potential connecting contract customers. These contract customers have submitted EOI bids or have already signed contracts for service with Enbridge Gas for new/incremental service that will result from the Project under the assumption that the OEB would not require a CIAC.[171] If a decision is rendered that requires the payment of a CIAC from these contract customers, they will have participated in their bidding processes in the absence of full information and may have expended resources attempting to move those additional investments forward.

Changes to the economic testing of proposed transmission pipelines (including when and how to impose a CIAC) would require the OEB to consider complex technical and methodological issues and competing factors.[172] Accordingly, the OEB finds that any change to the approach to economic testing for transmission pipelines, given the broad

[169] Enbridge Gas Reply Submission, pages 36-37
[170] Enbridge Gas Reply Submission, pages 36-37
[171] Atura Power Submission, pages 9-11, paragraphs 42-46
[172] Some of these issues and challenges are outlined in Enbridge Gas's reply submission at pages 47-52

implications of doing so, would require a larger audience than those who participated in this proceeding, to ensure all sectors impacted are able to engage on the issue.

The OEB further does not accept the submissions of some intervenors that not requiring a CIAC will result in an undue burden to existing customers given the low PI in Stage 1.

The OEB notes that final financial impacts on each customer rate class is not being determined in this proceeding. Rather, issues related to cost allocation mechanisms, including the mechanisms for allocation of Panhandle system costs, will be subject to review in a latter phase of Enbridge Gas's rebasing proceeding.[173] Arguments about how the costs of the Project or the Panhandle system should be divided between rate classes or different parts of the natural gas system can be considered there.

The OEB further notes that the Stage 1 shortfall for this Project is similar to or less than a number of other transmission expansions which were found by the OEB to be in the public interest without an undue burden.[174]

Moreover, while not determinative of this issue, the OEB observes that rate mitigation is typically provided where the total bill increase is 10% or more.[175]

The estimates provided by IGUA of the potential impact on the largest T2 customers are well below that threshold.

Finally, the OEB notes that existing customers, including T2 customers, have benefitted from natural gas transmission expansion projects in the past under the E.B.O. 134 test, without an obligation to provide a CIAC.

<u>E.B.O. 134 - Stage 2 Test</u>

Enbridge Gas conducted the Stage 2 cost/benefit analysis in accordance with the E.B.O. 134 test. The estimated cost savings to customers based on using natural gas instead of another energy source are $353 million for a 40-year horizon.[176]

OEB staff and several intervenors (Environmental Defence, Energy Probe, SEC) submitted that the Stage 2 benefits were significantly overstated based on the general premise of Dr. McDiarmid's evidence that Enbridge Gas's assumptions around customer heating choices in the absence of natural gas were not realistic and should

[173] Enbridge Gas Reply Submission, page 43
[174] Enbridge Gas Reply Submission, pages 43-44, Table 1
[175] EB-2022-0089, Decision and Order, page 8, March 24, 2022
[176] Exhibit E, Tab 1, Schedule 1, pages 4-5, June 16, 2023

include a higher share of electric heat pumps, and that the net benefit for each new general service customer from accessing natural gas would therefore be lower than calculated by Enbridge Gas.

Notwithstanding the comprehensive arguments of the parties on this issue, the OEB notes that the Stage 2 analysis only applies to general service customers, yet 94% of the capacity to be added by the Project is expected to serve large contract customers, of which heat pumps are not a viable option, and only 6% is expected to serve the general service market.

The OEB accepts the positions of Enbridge Gas and OEB staff that it is appropriate to set a floor of zero for Stage 2 NPV benefits (rather than calculating a negative Stage 2 NPV on the basis that other energy sources may be more cost-effective for customers than natural gas) as potential customers may choose not to connect to the natural gas system if their energy bills would be lower by not connecting. If a value of zero for Stage 2 NPV benefits is used, the Project still passes the three-stage E.B.O. 134 test.

Given these facts, the OEB does not find it necessary to make a determination on the specific assumptions used in Enbridge Gas's Stage 2 analysis.

E.B.O. 134 - Stage 3 Test

Enbridge Gas conducted the Stage 3 analysis in accordance with the E.B.O. 134 test. The Stage 3 analysis involved monetizing the value of other public interest considerations. Enbridge Gas estimated the economic benefits to Ontario are approximately $257 million, which is only related to the construction of the Project and does not include the economic benefits to Ontario when natural gas customers receiving the incremental supply invest and grow their operations. Enbridge Gas estimated that the total direct capital investment from these connecting customers would be $4.5 billion.[177]

Some intervenors raised concerns with the use of an economic multiplier of the direct capital cost of the Project as a method for calculating Stage 3 economic benefits. The OEB finds that Enbridge Gas has used the economic multiplier appropriately on the basis that the use of the economic multiplier has been previously accepted.

Additionally, the OEB notes that Enbridge Gas's Stage 3 analysis for the Project did not include the indirect economic development benefits associated with expansion of

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[177] Exhibit E, Tab 1, Schedule 1, pages 5-6, June 16, 2023

greenhouse production and benefits to the electricity system that would result from the reliable supply of gas-fired electricity generation enabled by the Project.

The OEB agrees with concerns expressed in the submissions of OGVG and OEB staff that if the Project is not undertaken, some customers may not expand in Ontario and may undertake those expansions in other jurisdictions, outside of Ontario, where their natural gas needs can be better served.

The OEB does not support suggestions by some intervenors that Enbridge Gas should include: (a) estimates of the public interest costs of the Project, such as future underutilization of the pipeline (stranded assets) because of the energy transition; and (b) increased GHG emissions and the broader macro-economic harms caused by increased natural gas rates as a result of the Project.[178]

Historically, such public interest costs have not been included in Enbridge Gas's Stage 3 analysis for projects requiring leave to construct. Moreover, no one has quantified what those costs would be for this Project. Any public interest costs (such as stranded assets) would need to be balanced against the forgone benefits of the Project. The evidence in the record does not lead the OEB to conclude that any public interest costs of the Project would outweigh the anticipated indirect economic benefits associated with the Project.

<u>Appropriate Proceeding to Consider CIAC</u>

The OEB is not setting rates for specific customers or classes of customers in this Decision.

The OEB acknowledges that the granting of leave to construct in this Decision may ultimately have an impact on rates, just as any other leave to construct approval ultimately has an impact on rates when those projects are added to rate base.

It is, therefore, not surprising that ratepayer groups seek to intervene in major leave to construct applications such as this proceeding.

However, the OEB's finding that leave to construct is in the public interest without a need for a CIAC neither sets a specific rate, nor authorizes Enbridge Gas to charge one nor requires anyone to pay one. The apportionment of the capital costs of the Project to the different customer rate classes will be decided in a future application.

[178] SEC Submission, page 9

In Procedural Order No. 4, the OEB decided that “the applicability of E.B.O. 134 and E.B.O. 188, and the extent to which contributions in aid of construction should be required are issues that are in scope for this proceeding.”

The proceeding consisted of written interrogatories and responses, a technical conference, responses to undertakings, three-days of hybrid hearings, Enbridge Gas’s argument-in-chief, written submissions by 13 parties to the proceeding, and a final reply submission by Enbridge Gas. The issue of CIAC was a significant focus of parties and the OEB in this proceeding.

The OEB’s view is that there is sufficient evidence on the record to make a finding on whether CIAC should be required.

Moreover, the OEB finds that it is appropriate to answer this question as the presence/absence of CIAC impacts issues in this Decision.

The issue of CIAC impacts the E.B.O. 134 test to be applied. CIAC would reduce the shortfall in the Stage 1 analysis and improve the PI for the Project.

CIAC is also relevant to the issue of “undue burden” that has been raised by parties.

The concept of “undue burden” is connected to whether it is in “public interest” to grant leave to construct– the ultimate issue to be decided in a leave to construct application.[179] Section 5.16 of E.B.O. 134 states:

> When considering the public interest in prior proceedings the Board has been satisfied if the welfare of the public is enhanced without imposing an undue burden on any individual, group or class. The Board will continue to be guided by this general principle in determining the extent to which gas service should be extended into other areas of the province.[180]

As a result, in the OEB’s view, it is not possible to defer the issue of “undue burden” to another day as it is tied to the “public interest” determination.

CIAC further relates to the issues of “need” and “alternatives” that are considered in this Decision. If a CIAC were to be required, the increased demand driven by the greenhouse sector may not materialize, at least in part.[181] This could, in turn, result in a

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[179] OEB Act, section 96
[180] See also E.B.O. 134, section 7.24
[181] Hybrid Hearing Transcript Vol. 3, pp. 31, 171, 178-179

material decrease in the projected demand for the Panhandle region and could impact the OEB's assessment of alternatives. Finally, the OEB notes that deciding whether a CIAC is required in a leave to construct application (and not at a rates application) is consistent with the OEB's past practice.

For example, Enbridge Gas was recently granted approval to relocate and construct natural gas pipelines, but only on the condition that it file a post construction report confirming that "actual final Project costs are fully funded by the CIAC payment from Metrolinx".[182]

The Dawn to Corunna proceeding, in an application brought under section 90 of the OEB Act, did not involve the consideration of a CIAC. Nor did the Dawn to Corunna proceeding apply the OEB's economic tests for leave to construct applications as that project was to replace an existing storage asset.

Instead, the OEB held in the Dawn to Corunna proceeding that issues of the appropriate allocation of storage and storage related costs to each of the regulated business and the unregulated business should be decided in the rates proceeding, a position that was supported by many of the parties in that proceeding.

Similarly, for this Project, the OEB is of the view that cost allocation between different customer rate classes is something to be decided in a future rates proceeding.

As explained above, that issue is separate from whether a CIAC should be required to recover some (or all) of the economic shortfall quantified in Stage 1 of the E.B.O. 134 test. Regulatory processes that are as predictable as possible are critical for utilities, investors, and consumers. The OEB has made findings on the CIAC issues in this proceeding, based on a sufficient evidentiary record, and in keeping with how this proceeding has progressed.

[182] EB-2023-0260, Decision and Order, page 9, April 19, 2024; see also EB-2023-0175, Decision and Order, March 7, 2024. The OEB's standard issues list for natural gas leave to construct application, also includes the following issue "3.3 Has the applicant demonstrated that the project's economics meet the OEB's economic tests using the methodology outlined in EBO 188 or EBO 134, as applicable? **Where a contribution in aid of construction is required, is the amount of the contribution reasonable and consistent with OEB policies?"** under the "Project Cost and Economics Category."

Energy Transition

In Procedural Order No. 7, the OEB stated that matters relating to energy transition and integrated resource planning, to the extent they may be relevant to the application, are within the scope of the proceeding.[183]

Submissions were received on the need for the OEB to take into consideration the long-term impact of the energy transition, with opinions on how that energy transition might unfold and which fuels are best suited to meet the energy needs of the Windsor Essex region.

Upon review of the evidence presented, it became apparent that energy transition issues are very complex and technical, with broad economic implications for Windsor Essex and for the Province of Ontario as a whole. In the OEB's view, many of these submissions went beyond the scope of this proceeding. This proceeding is about whether Enbridge Gas should be granted leave to construct a gas transmission pipeline.

The OEB acknowledges that energy transition could be relevant in considering the "need" for the Project and calculations in the economic testing.

However, the evidence is clear that even with the energy transition, there is a need for the Project that cannot be met by other means in the near term.

Moreover, even using a shorter time horizon of 20 years for the three-stage E.B.O. 134 test, the Project still passes given the benefits flowing from Stage 3 of that test.

Decisions regarding the sources of energy that will fuel Ontario's economic future will have significant implications for the province's growth, industrial strategy, and overall prosperity.

These issues cannot be resolved without broader consideration of what fuels Ontario is going to rely upon as the province evaluates its energy future. The OEB notes that any direction or mandate to decarbonize the energy system, or portions of it, will need to be developed with the necessary stakeholders, including the Government of Ontario and the IESO.

[183] Procedural Order No. 7, page 3, September 21, 2023

Dissent on Project Economics (Commissioner Moran):

Enbridge Gas has applied under section 90 of the OEB Act for leave to construct the Project. Section 90 is intended to address three questions that relate to whether a proposed gas facility is a prudent investment. Is the project needed? The OEB has concluded that yes, it is needed. Are there reasonable alternatives that would avoid or defer the need for the project? The OEB has concluded that no, there are not. Is the proposed cost reasonable? The OEB has concluded that yes, the proposed cost is reasonable. Based on the answers to these questions, granting leave to construct is in the public interest.

Separate from these questions, section 90 of the OEB Act does not address the question of how the cost of a project is to be recovered from ratepayers. The notice issued for this proceeding makes that clear:

> Enbridge Gas Inc. has applied to the Ontario Energy Board for approval to construct two pipelines and associated ancillary facilities, which are collectively referred to as the Panhandle Regional Expansion Project. The first pipeline, called the Panhandle Loop, involves the construction of approximately 19 kilometres of 36-inch diameter steel pipeline that will originate at Enbridge Gas Inc.'s existing Dover Transmission Station in the Municipality of Chatham Kent and tie in to an existing pipeline at a new valve site station, in the Municipality of Lakeshore. Enbridge Gas Inc. proposes to start construction of the Panhandle Loop in the first quarter of 2023 and to place the pipeline in-service by November 2023. The second pipeline, called the Leamington Interconnect, involves the construction of approximately 12 kilometres of 16-inch steel pipeline and valve site station facilities in the Municipality of Lakeshore, the Town of Kingsville and the Municipality of Leamington. Enbridge Gas Inc. proposes to start construction of the Leamington Interconnect in the second quarter of 2024 and to place the project in-service by November 2024. Enbridge Gas Inc. says that the Panhandle Regional Expansion Project is needed to add capacity to the Panhandle Transmission System which transports natural gas between Enbridge Gas Inc.'s Dawn Compressor Station, located in the Township of Dawn-Euphemia, and the Ojibway Valve Site, located in the City of Windsor. **Enbridge Gas Inc. estimates the cost of both phases of the project to be $314.4 million and says that it will seek approval to recover the cost from ratepayers in a future rate application.** Enbridge Gas Inc. is also asking the Ontario Energy Board to

> approve the form of agreement it offers to landowners to use their land for routing or construction of the proposed pipelines. [**Emphasis added**]

Subsequently, an amended notice was issued when Enbridge Gas amended its application based on a change in the proposed Project. The amended notice contained the same language regarding Enbridge Gas's intention to make a separate rates application to recover the cost of the project from ratepayers:

> Enbridge Gas Inc. applied to the Ontario Energy Board for approval to construct pipeline and associated ancillary facilities, which are collectively referred to as the Panhandle Regional Expansion Project. The pipeline, called the Panhandle Loop, involves the construction of approximately 19 kilometres of 36-inch diameter steel pipeline that will originate at Enbridge Gas Inc.'s existing Dover Transmission Station in the Municipality of Chatham Kent and tie into an existing pipeline at a new valve site station, in the Municipality of Lakeshore. Enbridge Gas Inc. proposes to start construction of the Panhandle Regional Expansion Project in the first quarter of 2024 to achieve an in-service date of November 2024. Enbridge Gas Inc. says that the Panhandle Regional Expansion Project is needed to add capacity to the Panhandle Transmission System which transports natural gas between Enbridge Gas Inc.'s Dawn Compressor Station, located in the Township of Dawn-Euphemia, and the Ojibway Valve Site, located in the City of Windsor. **Enbridge Gas Inc. estimates the cost of the project to be $358 million and says that it will seek approval to recover the cost from ratepayers in a separate rate application.** Enbridge Gas Inc. Is also asking the Ontario Energy Board to approve the form of agreement it offers to landowners to use their land for routing or construction of the proposed pipeline. [**Emphasis added**]

As confirmed in both OEB notices of proceeding, cost recovery from ratepayers is a rates question that is addressed in rates applications. Rates applications are made under section 36 of the OEB Act.

In this proceeding, Enbridge Gas has applied for relief under section 90 and section 96. It has not applied for relief under section 36.

A utility must apply for approval for any rate to be charged to a customer to pay for gas service under section 36 of the OEB Act, and a customer can only be charged for gas service in accordance with an order of the OEB under section 36 of the OEB Act. This includes any requirement for a customer to make a capital contribution to the cost of a project. Previous OEB decisions have confirmed this.

In EB-2012-0396, the OEB said:

> The [Pipeline Cost Recovery Agreement] essentially applies the formula for the calculation of capital contributions as set out by the Board in EBO 188. It is no doubt a useful document agreed to by the parties which formalizes the details surrounding the exact calculations, timing, etc. of the capital contribution. It does not, however, usurp the Board's underlying jurisdiction: indeed section 36(1) of the Act explicitly recognizes that, in setting just and reasonable rates, "[the Board] is not bound by the terms of any contract." The ultimate responsibility to ensure the rates paid by consumers are just and reasonable lies with the Board. [insertion added]
>
> …
>
> In summary, the Board finds that a capital contribution is a rate. As such it lies within the exclusive jurisdiction of the Board under section 36.[184]

In EB-2013-0365, the OEB said:

> The Board in a previous proceeding has determined that a capital contribution is a "rate" as contemplated by section 3 [the definition section] of the Act. None of the parties have disputed this. Accordingly the Board has jurisdiction to determine the amounts of capital contribution for the Leamington Line Project. [insertion added][185]

In EB-2018-0305, the OEB said:

> In a previous proceeding, the OEB concluded that a capital contribution is a rate. Section 36 of the OEB Act requires that a gas distributor have an order of the OEB to charge for the distribution of natural gas, and the OEB may make orders fixing just and reasonable rates for the distribution of gas using any method or technique it considers appropriate.[186]

In that proceeding, the OEB went on to order Enbridge Gas to refund customers the difference between what it had charged customers and what it was authorized to charge.

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[184] EB-2012-0396, Decision With Reasons, pages 15-16, February 7, 2013
[185] EB-2013-0365, Decision and Order, page 13, August 21, 2014
[186] EB-2018-0305, Decision and Order, page 35, September 12, 2019

Enbridge Gas itself also acknowledges that the question of whether to require a contribution in aid of construction is a rates question. At paragraph 129 of its reply argument, Enbridge Gas states:

> SEC criticizes Enbridge Gas for not providing an estimate of a contribution to EOI respondents. This criticism is unjustified since, as noted above, an appropriate contribution cannot be calculated because of transmission system dynamics. **Also, as a contribution is a rate, it would not be appropriate to estimate an amount that would prejudge any determination by the OEB and potentially wrongfully set or affect expectations of customers. [Emphasis added]**

Enbridge Gas is correct. Section 36(1) provides:

> No gas transmitter, gas distributor or storage company shall sell gas **or charge for the transmission, distribution or storage of gas except in accordance with an order of the Board**, which is not bound by the terms of any contract. **[Emphasis added]**

It is common ground amongst all the parties that the Project requires a very large ratepayer subsidy, based on the application of the E.B.O. 134 test. Enbridge Gas has used a 40-year revenue horizon for Stage 1 of the E.B.O. 134 test, which yields a profitability index of 0.48, which equates to a requirement for a $150 million ratepayer subsidy. The record also shows that if a 20-year revenue horizon was used, the profitability index would be 0.39, which equates to a requirement for a $174 million ratepayer subsidy.

Of additional concern is the fact that 94% of the incremental capacity provided by the Project is forecast to be used by contract customers, whose demand is (or will be) underpinned by shorter-term firm service customer contracts. Atura Power alone accounts for 38% of the demand. Atura Power’s gas demand is underpinned by a five-year contract with Enbridge Gas and a ten-year electricity contract with the IESO, which includes provision for compensation in the event that the OEB determines that there should be a capital contribution or CIAC required from Atura Power as a result of any allocation of the ratepayer subsidy to Atura Power.

Other customer contracts signed to date range from five to twelve years.[187] If one uses a ten-year contract period as the revenue horizon to calculate the ratepayer subsidy, the subsidy only becomes larger.

As IGUA submitted, the largest allocation of the Project costs would go to Rate T2 (Firm) customers, based on the allocation methodology applied in previous rates applications. Under that methodology, Rate T2 customers in Ontario would subsidize Atura Power, Capital Power, and certain greenhouse growers to the tune of approximately $3.7 million annually, resulting in almost a 5.5% percent annual gas delivery bill impact for the largest subsidizing T2 customers.[188] Of course, we have yet to see what Enbridge Gas is actually going to propose since we have yet to see their rates application. Notwithstanding that, Commissioners Dodds and Sword are prepared to rule on the need for capital contributions without seeing the rates application that Enbridge Gas intends to file. Essentially, they are prejudging a key aspect of what constitutes just and reasonable rates under section 36.

E.B.O. 134 precludes undue subsidies from existing customers.

At the beginning of Day 1 of the Hearing, I stated on behalf of the Panel:

> I think, as you know from previous correspondence, there are several important issues to address here. Of particular interest for the Panel are the issues relating to need and alternatives, to the extent that alternatives include DSM and IRP matters, and ultimately who pays for this project in the event that it gets approved.[189]

On Day 2 of the Hearing, I asked Enbridge Gas to providing an undertaking response on how it would calculate a CIAC:

> If this hearing panel directs you to collect a contribution in aid of construction in order to increase the profitability of the prep project to meet a profitability index of 1, what would you propose and why. [190]

Then on Day 3, I had a discussion with Enbridge Gas witnesses (starting at page 97) which culminated in the following exchange:

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[187] Exhibits I.STAFF.24 and J2.12
[188] Exhibit I.IGUA.2, Attachment 1, page 1, line 30 and page 2, line 16
[189] Hybrid Hearing Transcript, Vol. 1 page 1
[190] Hybrid Hearing Transcript, Vol.2, page 42

> MR. MORAN: All right. So would you agree, then, that, for the purposes of what we decide here, the size and impact of that subsidy is something that we should take into account before we finalize our decision on this?
>
> MR. MacPHERSON: We would agree. This is a public interest matter to the extent that the subsidy provides value to the broader economy.[191]

The record for this proceeding has benefited greatly from the resulting exploration of these issues and provides clarity on the relationship between section 90 and section 36 of the OEB Act.

Based on the record before us, an important question for the OEB to answer is whether the required subsidy for the Project amounts to an undue burden on ratepayers. There are only two options available to the OEB.

One option is to deny the requested leave to construct, on the basis that it would result in an undue burden on current ratepayers that cannot be remedied. This option is not feasible, given that Enbridge Gas has established the near term need for the Project, there are no reasonable alternatives to the Project, and the Project costs are reasonable.

The other option is to grant leave to construct on the basis that the need for the Project has been established, the Project is the most reasonable alternative to meet the need, and the Project cost is reasonable in comparison to similar projects and, therefore, is in the public interest. Given the determination that the overall cost of the Project is reasonable, what would remain is how that cost would be allocated to ratepayers and recovered in rates. This would include the extent to which any capital contribution may be required from ratepayers benefitting from the Project to address the impact of the ratepayer subsidy on ratepayers that will not benefit from the Project. This is properly addressed when Enbridge Gas files its planned rates application to recover the cost of the Project from ratepayers. This is a rates question. Contributions in aid of construction are used to avoid undue subsidies from being added to the rates paid by existing ratepayers. The question of undue burden resulting from the rate subsidy required for the Project is part and parcel of determining whether Enbridge Gas's rates application to recover the cost of the Project will result in just and reasonable rates. That question cannot be answered in this proceeding because Enbridge Gas has not filed its rates application and the full context provided by a rates proceeding is not available in this proceeding.

[191] Hybrid Hearing Transcript Vol. 3, page 101

The OEB had a similar challenge to address in EB-2022-0086, another leave to construct application which involved the replacement of a compressor station with a pipeline. The OEB granted leave to construct on the basis that Enbridge Gas had demonstrated the need for the project, that the project was the most reasonable alternative and the project cost was reasonable compared to similar projects.[192] When it came to how the cost of the project would be recovered from ratepayers, the OEB stated; "However, the OEB is not making any decision on whether any part of the Project cost is appropriate for inclusion in rate base.".[193]

Of particular note in that proceeding was Enbridge Gas's position that the allocation of project costs for recovery from ratepayers is more appropriately addressed in a rates application.[194]

There is little difference between determining to what extent the cost of a project is to be allocated between ratepayers and Enbridge Gas's unregulated business, as in EB-2022-0086, and amongst ratepayers, including in the form of a requirement for capital contribution, as in the present case. Allocation of cost is a standard feature of any rates proceeding. In fact, if the OEB determines that Enbridge Gas's unregulated business should be allocated some of the cost of the EB-2022-0086 project, that is tantamount to requiring a capital contribution from that unregulated business.

By any measure, the required subsidy is very large, in terms of the dollar amount, and in terms of the percentage of the capital cost of the Project, regardless of whether one uses a 40-year revenue horizon, a 20-year revenue horizon, or a shorter revenue horizon based on the term of the contracts that underpin the need for the Project.

Is the required subsidy undue? The fact that the required subsidy is large does not automatically mean it is undue. If it is undue, how should it be addressed? Should the benefiting customers be required to pay a CIAC? While these are important questions, they are questions that relate to rates, and this is not a rates case. Who pays and how much are questions for a rates proceeding.

Notwithstanding this Decision and Order to grant leave to construct, Enbridge Gas must still apply for a rate order to recover the cost of the Project. Enbridge Gas intends to apply for approval of a rate rider, under section 36 of the OEB Act, to recover the cost of the Project, as proposed and accepted in Enbridge Gas's 2024 rebasing proceeding.

[192] EB-2022-0086, Decision and Order, pages 9, 14, and 18 respectively
[193] Ibid, at page 18
[194] Ibid at page 18, and Enbridge Gas Reply Submission paragraph 33, pages 15-16

Given that the current proceeding is a leave to construct proceeding, and not a rates proceeding, the OEB does not have the necessary record upon which to render a rates decision, including how Enbridge Gas proposes to allocate the Project costs to ratepayers and what bill impacts that will have on ratepayers, and whether just and reasonable rates can be established with or without resort to a requirement for ratepayers benefitting from the Project to pay a capital contribution.

The approach in previous decisions has not been uniform, including cases that made use of an Hourly Allocation Factor to address the subsidy issue.[195] When Enbridge Gas files its rates application under section 36, it will bear the burden of proof to establish that its proposed rates are just and reasonable, a matter that is not before us in this proceeding. To the extent that the rate rider includes recovery of the very large subsidy in this case, Enbridge Gas bears the burden of proof to establish that any approach it may propose for the recovery of the very large subsidy is just and reasonable. E.B.O 134 precludes undue subsidies, but does not address the question of how to determine whether a subsidy is undue, nor what to do if it is determined that a subsidy is undue. These are issues that can be addressed in a section 36 application. Enbridge Gas will have the opportunity to make that case when it applies for approval of its rates proposal.

Ultimately, this proceeding is looking at section 90 related issues, not section 36 related issues. Accordingly, I take no position on whether there should or should not be a requirement for customers benefitting from the Project to pay a capital contribution or CIAC for the Project. That would be a section 36 decision and Enbridge Gas has not yet filed its section 36 application. The OEB has decided what needs to be decided in this leave to construct proceeding.

In making a finding that CIACs are not required, Commissioners Dodds and Sword are purporting to answer a rates question that is properly answered under section 36, by applying the E.B.O, 134 test, which is a guideline developed by the OEB, in a manner that is inconsistent with the OEB Act and the relationship between sections 90 and 36 of the Act. They have prejudged a component of the cost allocation question that is part of the OEB's jurisdiction over rates under section 36. They assert they are not setting a specific rate or authorizing Enbridge Gas to charge one. Their assertion misses the point. Whether they say "yes" or "no" to a capital contribution, they are answering a specific rates question and purporting to limit the subsequent rates proceeding to only considering the apportionment of the capital cost to the different customer rate classes.

[195] See for example, IGUA's submission, para. 56

In a rates proceeding, the question of who pays includes the question of whether any capital contribution should be required. The “who pays” question is the allocation question. If the majority are of the view that allocation to different rate classes is a rates question, then how is that any different from the allocation in the form of a capital contribution to customers who would benefit from the project? And then there is what the three of us did unanimously in EB-2022-0086. In leaving the question of how much of the Dawn to Corunna project should be allocated to the unregulated business, we were correctly leaving that rates question to be decided in a rates proceeding, along with the question of what costs should be allocated to the different rates class.

In my view, their conclusion is an opinion reached in the absence of a section 36 application record. Their conclusion cannot constrain the jurisdiction of the OEB to determine what constitutes just and reasonable rates once Enbridge Gas files its rates application to recover the cost of the Project. It is not clear why they wish to rush to prejudge a rates question, when the rates application will be filed in due course.

In this regard, a decision to determine that there is no requirement for a capital contribution in this proceeding is as problematic for ratepayers as a decision to require a capital contribution would be for Enbridge Gas.

Enbridge Gas will file its section 36 application and the OEB will decide based on the record in that proceeding whether Enbridge Gas has met the burden of proof to establish that its proposal to recover the cost of the Project is just and reasonable, as required by subsection 36(6) of the OEB Act[196]. If Enbridge Gas does not meet this burden of proof, the OEB “may, if it is not satisfied that the rates applied for are just and reasonable, fix such other rates as it finds to be just and reasonable.”.[197] And this can all be done on proper notice to ratepayers.

If I am wrong regarding the jurisdiction to address the issue of capital contribution or CIAC in this section 90 proceeding, the ability to decide that question still requires the same evidence regarding the amount to be recovered, the proposed allocation of that cost, the resulting bill impact of that allocation, and whether that allocation and bill impact requires consideration of whether to allocate some of that cost in the form of a CIAC. The conclusion on these questions informs the question of whether the resulting rates are just and reasonable, a question that has not been answered in the majority decision, and more importantly, cannot be answered based on the record before us in

[196] 30(6) Subject to subsection (7), in an application with respect to rates for the sale, transmission, distribution or storage of gas, the burden of proof is on the applicant.
[197] Subsection 36(5) of the OEB Act

this section 90 proceeding. At the end of the day, ratepayers can only be required to pay rates that are just and reasonable. The majority decision fails on that consideration.

3.4 Environmental Impacts

Enbridge Gas retained AECOM Canada Limited to complete the Environmental Report and the consultation process in accordance with the OEB's Environmental Guidelines (7th Edition).[198]

The Environmental Report assessed the existing bio-physical and socio-economic environment in the study area, the alternative routes, proposed the preferred route, conducted public consultation, conducted impacts assessment and proposed mitigation measures to minimize the impacts of the Project.

On April 29, 2022, Enbridge Gas distributed the Environmental Report to the members of the Ontario Pipeline Coordinating Committee (OPCC), affected conservation authorities, municipalities and other stakeholders for review and comment. Enbridge Gas also conducted, as part of the consultation, virtual open house sessions held on November 17, 2021 to December 3, 2021 and on February 14, 2022 to February 28, 2022.

Enbridge Gas stated that it did not conduct additional public consultation on the updated application filed on June 16, 2023.[199] However, Enbridge Gas sent a letter describing the updated scope of the Project[200] to OPCC members, affected municipalities, conservation authorities, landowners, Indigenous communities, and other local agencies. Enbridge Gas filed a summary of the comments received as of June 5, 2023 in the updated application.[201] Enbridge Gas also advised that no updates to the comments were received since June 5, 2023.[202]

Enbridge Gas provided a summary of the status of it receiving the necessary permits and approvals for construction.[203] Enbridge Gas stated that it will obtain all the permits and approvals prior to the start of construction.

Enbridge Gas noted that clearance from the Ministry of Citizenship and Multiculturalism (MCM) for archeological surveys and assessments at the Richardson Sideroad Valve

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[198] Exhibit F, Tab 1, Schedule 1, pages 1-2, June 16, 2023; Enbridge Gas noted that the OEB released the 8th Edition of the Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario in March 2023, after the initiation, consultation and finalization of the Project and associated Environmental Report.
[199] Exhibit I.STAFF.29 (a)
[200] The scope of the Project was updated in June 2023 to exclude the Leamington Interconnect.
[201] Exhibit F, Tab 1, Schedule 1, page 2, paragraph 5 and Attachment 2, June 16, 2023
[202] Exhibit I.STAFF.28 (a)
[203] Exhibit I.STAFF.21 (a)-(d), pages 1-3

Site Station and adjacent lands may not be obtained by March 31, 2024. The reason is that Enbridge Gas had not obtained agreement from a landowner to access to the lands at the planned location of the Richardson Sideroad Station to complete the archeological survey. However, Enbridge Gas stated that it expects to receive approval for early access from the OEB and submit the Archeological Survey report to the MCM so that MCM can grant clearance for archeology at that site by the summer of 2024. As discussed later in the Landowner Matters section of the Decision and Order, the OEB approved Enbridge Gas's request for early access to the above noted properties on April 2, 2024.[204] The Environmental Report incorporates mitigation measures and commits to the development of an Environmental Protection Plan prior to the start of construction. The site-specific mitigation measures will be implemented during construction according to the Project-specific Environmental Protection Plan. Enbridge Gas will communicate the Environmental Protection Plan to the Environmental Inspector who will assist the project manager in ensuring that the mitigation measures are conducted and completed as specified.

Position of Parties on Environmental Impacts

Three Fires Group raised multiple concerns related to potential environmental impacts, mitigation, monitoring and reporting related to the Project.[205] Three Fires Group requested that the OEB include, in its decision, requirements for Enbridge Gas to engage potentially impacted Indigenous communities into planning and implementation of construction, environmental inspection during construction, site restoration, monitoring and reporting. Specifically, Three Fires Group asked that impacted Indigenous communities be involved in review of a draft Environmental Protection Plan for the Project. Some of the concerns raised by Three Fires Group include the risks of: (a) the release of drilling fluids and the related impact on aquatic habitats; and (b) watercourse crossing construction impacts. Three Fires Group also raised concerns regarding tree clearing and site restoration methods. Three Fires Group proposed that certain conditions related to environmental assessment, monitoring and reporting should be included in the Project's approval and "…in any order granting EGI leave to construct.".[206]

OEB staff submitted that Enbridge Gas has completed the Environmental Report in accordance with the OEB's Environmental Guidelines. OEB staff has not identified any

[204] EB-2022-0285, Decision and Order, April 2, 2024
[205] Three Fires Group Submission, pages 10-15, paragraphs 24-44
[206] Three Fires Group Submission, pages 14-15, paragraph 45

concerns with the environmental aspects of the Project. OEB staff also noted that Enbridge Gas is committed to implementing the mitigation measures set out in the Environmental Report and to completing the Environmental Protection Plan prior to the start of construction.

In response to the issues and concerns raised by Three Fires Group, Enbridge Gas stated that its mitigation and monitoring measures were informed by consultation with Indigenous communities. Enbridge Gas noted that its environmental mitigation, monitoring and reporting commitments address Three Fires Group's concerns. Enbridge Gas provided concrete commitments to address the specific concerns raised by Three Fires Group in its reply argument.[207] Enbridge Gas also committed to provide a copy of Environmental Protection Plan to Three Fires Group and any other interested Indigenous communities upon request.[208]

Decision on Environmental Impacts (Commissioners Moran, Dodds and Sword):

The OEB finds that Enbridge Gas has completed the Environmental Report in accordance with the OEB's Environmental Guidelines.

The OEB notes that Enbridge Gas is committed to implementing the mitigation measures set out in the Environmental Report and to completing the Environmental Protection Plan prior to the start of construction.

In response to concerns raised by Three Fires Group (except for the request regarding the Environmental Protection Plan which is addressed in section 3.7), the OEB notes Enbridge Gas's commitments to its environmental mitigation, monitoring and reporting addresses these concerns. The OEB is satisfied with the commitments made by Enbridge Gas to Three Fires Group in its reply argument.

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[207] Enbridge Gas addressed concerns with crossing the waterways, impacts on aquatic habitats, ongoing monitoring of fugitive emissions, and tree removal and restoration in Enbridge Gas Reply Submission, pages 86-89, paragraphs 198-200
[208] Enbridge Gas Reply Submission, page 86, paragraph 197

3.5 Landowner Matters

Enbridge Gas filed the forms of temporary land use[209] and permanent easement[210] agreements. The forms of agreement were approved by the OEB in a previous proceeding, Enbridge Gas's Haldimand Shores Community Expansion Project.[211]

Enbridge Gas requires approximately 19 kilometres of 23 metres width of permanent easement translating to 42.0 hectares (104 acres) for the Project to ensure safety and to provide necessary working space for maintenance. Enbridge Gas also requires 71.6 hectares (177 acres) of temporary easements for construction and topsoil storage.

Enbridge Gas noted that it requires early access land rights for the purposes of conducting environmental and engineering examinations and surveys, necessary for fixing the site and completing relevant approvals.

Enbridge Gas has obtained early access land rights and has entered into easement and temporary land use agreements with 53 of the 56 affected property owners. For the three properties located at the proposed construction site of the Richardson Side Road Valve Site Station (Richardson Sideroad Properties), Enbridge Gas was unable to secure early access land rights to conduct the necessary surveys such as the archeological survey. These properties are adjacent to one another and are owned by related parties under common control. Enbridge Gas has corresponded with this landowner since January 2022 and negotiations have not progressed to a stage where early access rights have been granted. The landowner of these three properties is a registered intervenor in this proceeding (Courey Corporation).

Enbridge Gas stated that the major restrictions imposed on the landowner by the permanent easement agreement are that the landowner cannot erect buildings or privacy fencing on the easement and cannot excavate or install field tile without prior notification to Enbridge Gas. Enbridge Gas stated that the landowner is free to farm the easement or turn it into a laneway.

On June 16, 2023, Enbridge Gas filed an application with the OEB under section 98(2) of the OEB Act (Early Access Application) for an order authorizing entry onto the properties to complete the necessary examinations and surveys.[212] On April 2, 2024,

[209] Exhibit G, Tab 1, Schedule 1, Attachment 4, June 16, 2023
[210] Exhibit G, Tab 1, Schedule 1, Attachment 3, June 16, 2023
[211] EB-2022-0088, Decision and Order, August 18, 2022
[212] EB-2022-0285

the OEB issued its decision on the Early Access Application approving Enbridge Gas's request for early access to the three properties, subject to the Conditions of Approval attached in that decision.[213]

Position of Parties on Landowner Matters

OEB staff submitted that Enbridge Gas appears to be appropriately managing land-related matters. OEB staff also noted that the standard conditions of approval require that Enbridge Gas secure all necessary land rights required for the construction of the Project.

OEB staff further submitted that the OEB should approve the proposed forms of permanent easement and temporary land use agreements as both were previously approved by the OEB.

Courey Corporation, an intervenor in this proceeding representing the interests of the three Richardson Sideroad Properties, had an opportunity to provide written submissions on this issue. Courey Corporation did not provide a written submission on this or other issues in this proceeding.

Decision on Landowner Matters (Commissioners Moran, Dodds and Sword):

The OEB finds that Enbridge Gas has appropriately managed land-related matters.

The OEB approves the proposed forms of permanent easement and temporary land use agreements as both are consistent with what has been previously approved by the OEB.

The OEB notes that the standard conditions of approval require that Enbridge Gas secure all necessary land rights required for the construction of the Project.

[213] EB-2022-0285, Decision and Order, April 2, 2024

3.6 Indigenous Consultation

In accordance with the OEB's Environmental Guidelines, Enbridge Gas contacted the Ministry of Energy on June 29, 2021 with respect to the Crown's duty to consult related to the Project.[214] The Ministry of Energy, by way of a letter, delegated the procedural aspects of the Crown's Duty to Consult for the Project to Enbridge Gas on August 6, 2021 (Delegation Letter). In the Delegation Letter, the Ministry of Energy identified the following Indigenous communities that Enbridge Gas should consult in relation to the Project:

- Aamjiwnaang First Nation
- Bkejwanong (Walpole Island First Nation)
- Caldwell First Nation
- Chippewas of the Thames First Nation
- Chippewas of Kettle and Stony Point First Nation
- Oneida Nation of the Thames
- Delaware Nation[215]

Three Fires Group, an Indigenous business corporation, that jointly represents the interests of Chippewas of Kettle and Stony Point First Nation and Caldwell First Nation, has actively participated in the proceeding as a registered intervenor. Enbridge Gas has engaged and consulted with the Three Fires Group members in the consultation process as delegated by the Ministry of Energy.

On June 10, 2022, Enbridge Gas provided to the Ministry of Energy the original Indigenous Consultation Report (ICR) for the Project. Enbridge Gas filed the ICR and supporting documents with the application's evidence. As part of the evidence, Enbridge Gas filed a summary of the Indigenous consultation activities up to June 7, 2022.[216] Enbridge Gas updated the engagement log, and the summaries of comments as of September 9, 2022.

Shortly before filing the updated application, Enbridge Gas provided to the Ministry of Energy, on June 6, 2023 a description of the Project reflecting changes made to the

[214] Enbridge Gas filed an updated application on June 16, 2023 reducing the scope of the Project by eliminating Leamington Interconnection component of the original Project and, amongst other things, updating the Indigenous consultation evidence.
[215] In a follow-up email on August 6, 2021, the Ministry of Energy asked that Delaware Nation be included in the engagement and consultation on the Project.
[216] Exhibit H, Tab 1, Schedule 1, Attachment 6, and Attachment 7, June 16, 2023

Project scope. On June 16, 2023, on the date of the updated application filing, Enbridge Gas provided to the Ministry of Energy an updated ICR, which reflected a description of changes to the scope of the Project.[217] The Ministry of Energy confirmed that no changes to the direction provided in the Delegation Letter were required as a result of the Project update.

On February 15, 2024, Enbridge Gas filed a Letter of Opinion issued by the Ministry of Energy dated February 9, 2024, which states that the Ministry of Energy is satisfied with "…the procedural aspects of Indigenous consultation undertaken by Enbridge to date for the purposes of the OEB's Leave to Construct process for the Panhandle Regional Expansion Project are satisfactory.".[218] The Letter of Opinion also indicated that it is expected that Enbridge Gas continue its Indigenous engagement activities throughout the life of the Project and that Enbridge Gas would notify the Ministry of Energy if any additional issues and concerns arise.

Position of Parties on Indigenous Consultation

Three Fires Group submitted that there are significant shortcomings in Enbridge Gas's application regarding Indigenous consultation, mostly reflected in the Environmental Report preparation and content.[219] Specifically, Three Fires Group asked that the OEB, in its decision, require Enbridge Gas to "… going forward to improve its Indigenous consultation practices by being more proactive (or at a minimum EGI must be less passive) in incorporating the histories and positions of First Nations into an application for leave to construct in order to satisfy the OEB's consultation requirements and expectations.".[220] Three Fires Group asked that, should the OEB approve the Project, a number of conditions related to the environmental assessment, impacts mitigation, monitoring and reporting be added as conditions of approval for the Project.

Three Fires Group's requests and concerns related to the environmental report and assessment have been addressed in sections 3.4 Environmental Impacts and 3.7 Conditions of Approval of this Decision and Order.

Enbridge Gas maintained that it has conducted a meaningful consultation with Indigenous communities.[221] Enbridge Gas stated that it is committed to continue to pursue meaningful dialogue and engagement with the identified Indigenous communities

[217] Exhibit H, Tab 1, Schedule 1, page 2, paragraphs 5-6, June 16, 2023
[218] Exhibit H, Tab 1, Schedule 1, Attachment 4, February 14, 2024
[219] Three Fires Group Submission, pages 5-10, paragraphs 9-23
[220] Three Fires Group Submission, page 10, paragraph 22
[221] Enbridge Gas Reply Submission, pages 77-80, paragraphs 190-196

throughout the life of the Project to ensure impacts on Indigenous or treaty rights are appropriately addressed.[222]

OEB staff noted that it was not aware of any outstanding concerns from Indigenous communities regarding any Aboriginal or treaty rights and observed that Enbridge Gas has committed to ongoing communication and to address concerns raised by the Indigenous communities related to the Project.

Decision on Indigenous Consultation (Commissioners Moran, Dodds and Sword):

The OEB is satisfied that Enbridge Gas has conducted a meaningful consultation with Indigenous communities.

The OEB is satisfied that Enbridge Gas followed the OEB's Environmental Guidelines with respect to Indigenous consultation.

This finding is also supported by the Ministry of Energy's Letter of Opinion regarding the consultations undertaken by Enbridge Gas, which states that the Ministry of Energy is satisfied that "…the procedural aspects of Indigenous consultation undertaken by Enbridge to date for the purposes of the OEB's Leave to Construct process for the Panhandle Regional Expansion Project are satisfactory.". [223]

Based on these findings, the OEB concludes that the duty to consult has been discharged sufficiently to allow it to grant leave to construct the Project.

The OEB notes the commitment of Enbridge Gas to continue to pursue meaningful dialogue and engagement with the identified Indigenous communities throughout the life of the Project to ensure impacts on Indigenous or treaty rights are appropriately addressed.

[222] Enbridge Gas Argument in Chief, page 41, paragraph 105
[223] Ibid.

3.7 Conditions of Approval

Enbridge Gas stated that it has reviewed the OEB's standard conditions of approval and has not identified any additional or revised conditions to propose for the Project.[224] In response to an OEB staff interrogatory, Enbridge Gas also accepted these standard conditions of approval.[225]

By letter dated April 3, 2024, the OEB advised that it has made minor modifications to the standard conditions of approval for leave to construct applications. More specifically, minor modifications were made to Conditions 2(b)(ii) and (iv), 7(a), and 7(b) to better reflect the intent of those conditions.

Position of Parties on Conditions of Approval

OEB staff submitted that the OEB should approve the Project subject to the OEB's standard conditions of approval attached as Schedule A to its submission.

APPrO also submitted that the conditions of approval of the Project should be identical to the OEB's standard conditions of approval.

In the scenario that the OEB determines that CIAC payments should be required, given the potential that Enbridge Gas would need to re-evaluate the demand for the Project, OEB staff submitted that it may be appropriate to extend certain timelines in the OEB's standard conditions of approval (e.g., 12-month termination of leave to construct approval, etc.).

IGUA submitted that the OEB should direct application of the HAF mechanism to the Project as a condition of approval.

As previously discussed in sections 3.4 and 3.6 of this Decision and Order, Three Fires Group requested that the OEB include, in its decision, requirements for Enbridge Gas to engage potentially impacted Indigenous communities into planning and implementation of construction, environmental inspection during construction, site restoration, monitoring and reporting. Specifically, Three Fires Group asked, as a condition of approval, that impacted Indigenous communities be involved in review of a draft Environmental Protection Plan for the Project.

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[224] Exhibit I, Tab 1, Schedule 1
[225] Exhibit I.STAFF.23

Decision on Standard Conditions of Approval (Commissioners Moran, Dodds and Sword):

The OEB approves the Project subject to the OEB's standard conditions of approval, inclusive of the minor modifications referenced above, attached as Schedule A to this Decision.

Decision on Proposed Additional Conditions of Approval (Commissioners Dodds and Sword):

The OEB acknowledges the request by Three Fires Group to add as a condition of approval a requirement that Enbridge Gas provide a draft of the Proposed Environmental Protection Plan for their review and comments.

The OEB also notes that the Three Fires Group made the same request in the Watford Pipeline Project proceeding, a condition to which the OEB granted.

Enbridge Gas stated that it is committed to continue to pursue meaningful dialogue and engagement with the identified Indigenous communities throughout the life of the Project to ensure any impacts on Indigenous or treaty rights are appropriately addressed.

Engagement and dialogue involve building relationships that go beyond document sharing. The record indicates that Three Fires Group and Enbridge Gas have been in dialogue regarding environmental issues, and it would be the OEB's expectation that this will continue, and as such, does not find that a requirement to do so is needed. The responsibility for an Environmental Protection Plan and its implementation rests with the applicant.

Dissent on Proposed Additional Conditions of Approval (Commissioner Moran):

Enbridge Gas stated that it is committed to continue to pursue meaningful dialogue and engagement with the identified Indigenous communities throughout the life of the Project to ensure any impacts on Indigenous or treaty rights are appropriately addressed. To this end, Three Fires Group requested an additional condition of approval requiring Enbridge Gas to provide a draft of the proposed Environmental Protection Plan for review and comment. Enbridge Gas made the same commitment in its Watford Pipeline Project proceeding[226] to continue to pursue meaningful dialogue and engagement, and Three Fires Group made the same request, which the OEB granted.[227]

Dialogue is more than providing a copy of a completed document. There is no reason to believe that Enbridge Gas will not live up to its commitment, no reason to believe that Three Fires Group will not review and comment on the draft Environmental Protection Plan expeditiously, and therefore no reason not to grant the requested condition of approval. When the Environmental Protection Plan is developed, the expectation is that it will address the commitments that arose from the Indigenous consultation process.

As participants in that process, Three Fires Group should have an opportunity to review a draft to confirm that is the case. My fellow Commissioners do not agree that this condition of approval should be applied. My hope is that Enbridge Gas will agree to the request by Three Fires Group to review and comment on the draft Environmental Protection Plan in the spirit of its commitment to meaningful dialogue. Three Fires Group has participated in the consultation process and in this proceeding conscientiously and have added helpful perspective that has assisted the decision-making process. There is no reason not to believe they will continue to act in this way when reviewing and commenting on the draft Environmental Protection Plan. The majority provides no substantive or meaningful reason to deny the requested addition to the conditions of approval. Suggesting that it is solely up to Enbridge Gas to decide whether to provide a draft of the Environmental Protection Plan for review and comment is not consistent with the OEB's role as the Crown actor in this process.

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[226] EB-2023-0175
[227] EB-2023-0175 Decision and Order, page 12 and Schedule B, Conditions of Approval, March 7, 2024

3.8 Cost Awards

In Procedural Order No. 4, dated December 14, 2022, the OEB approved Enbridge Gas's request to place the application in abeyance as of December 5, 2022. On February 7, 2023, the OEB issued Procedural Order No. 5, in which it set out the process for filing interim cost claims for cost incurred up to December 5, 2022. In its Decision and Order on Interim Cost Awards, dated March 29, 2023, the OEB granted interim cost awards to a number of intervenors.

Intervenors that have not previously been awarded interim cost awards should file cost claims for the entirety of the proceeding through the OEB's online filing portal.

Intervenors that have previously been awarded interim cost awards should also file a cost claim for the entirety of the proceeding through the OEB's online filing portal. Any amount received as an interim award will be applied as a credit against the total cost claim in the OEB's final cost award decision. The OEB's Decision and Order on Interim Cost Awards noted that the OEB will conduct a complete review of cost claims at the conclusion of the proceeding. The OEB also noted that Enbridge Gas will have an opportunity to file objections at that time and intervenors whose total claims were subject to objections will have an opportunity to reply. The OEB stated that interim awards of costs may be subject to adjustment at that time.

Requiring all intervenors to file cost claims for the entirety of the proceeding on the same date is expected to assist Enbridge Gas in considering any cost claim objections and assist the OEB in deciding final cost awards on a consistent basis.

4 ORDER

THE ONTARIO ENERGY BOARD ORDERS THAT:

1. Enbridge Gas Inc. is granted leave, pursuant to section 90(1) of the OEB Act, to construct the Project in the Municipality of Chatham Kent and the Municipality of Lakeshore as described in its application.

2. Pursuant to section 97 of the OEB Act, the OEB approves the form of Easement Agreement and Form of Temporary Land Use Agreement that Enbridge Gas Inc. has offered or will offer to each owner of land affected by the Project.

3. Leave to construct is subject to Enbridge Gas Inc. complying with the Conditions of Approval set out in Schedule A.

4. Parties in receipt of confidential information shall either return the subject information to the Registrar and communicate to Enbridge Gas Inc. that they have done so; or destroy or expunge the information and execute a Certificate of Destruction, following the end of this proceeding, in accordance with the OEB's *Practice Direction on Confidential Filings*. The Certificate must be filed with the Registrar and a copy sent to Enbridge Gas Inc.

5. Eligible intervenors shall file with the OEB and forward to Enbridge Gas Inc. their respective final cost claims in accordance with the OEB's *Practice Direction on Cost Awards* on or before **May 28, 2024**.

6. Enbridge Gas Inc. shall file with the OEB and forward to intervenors any objections to the claimed costs of the intervenors on or before **June 7, 2024.**

7. If Enbridge Gas Inc. objects to any intervenor costs, those intervenors shall file with the OEB and forward to Enbridge Gas Inc. their responses, if any, to the objections to cost claims on or before **June 17, 2024**.

8. Enbridge Gas Inc. shall pay the OEB's costs incidental to this proceeding upon receipt of the OEB's invoice.

Parties are responsible for ensuring that any documents they file with the OEB, such as applicant and intervenor evidence, interrogatories and responses to interrogatories or any other type of document, **do not include personal information** (as that phrase is defined in the *Freedom of Information and Protection of Privacy Act*), unless filed in accordance with rule 9A of the OEB's Rules of Practice and Procedure.

Please quote file number, **EB-2022-0157,** for all materials filed and submit them in searchable/unrestricted PDF format with a digital signature through the OEB's online filing portal.

- Filings should clearly state the sender's name, postal address, telephone number and e-mail address.
- Please use the document naming conventions and document submission standards outlined in the Regulatory Electronic Submission System (RESS) Document Guidelines found at the File documents online page on the OEB's website.
- Parties are encouraged to use RESS. Those who have not yet set up an account, or require assistance using the online filing portal can contact registrar@oeb.ca for assistance.
- Cost claims are filed through the OEB's online filing portal. Please visit the File documents online page of the OEB's website for more information. All participants shall download a copy of their submitted cost claim and serve it on all required parties as per the Practice Direction on Cost Awards.

All communications should be directed to the attention of the Registrar and be received by end of business, 4:45 p.m., on the required date.

Email: registrar@oeb.ca
Tel: 1-877-632-2727 (Toll free)

DATED at Toronto May 14, 2024

ONTARIO ENERGY BOARD

Nancy Marconi
Digitally signed by Nancy Marconi
Date: 2024.05.14 11:50:40 -04'00'

Nancy Marconi
Registrar

SCHEDULE A

DECISION AND ORDER

ENBRIDGE GAS INC.

EB-2022-0157

MAY 14, 2024

**Leave to Construct Application under
Section 90 of the OEB Act**

**Enbridge Gas Inc.
EB-2022-0157**

Conditions of Approval

1. Enbridge Gas Inc. shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2022-0157 and these Conditions of Approval.

2. (a) Authorization for leave to construct shall terminate 12 months after the decision is issued unless construction has commenced prior to that date.
   (b) Enbridge Gas Inc. shall give the OEB notice in writing:
      i. of the commencement of construction, at least 10 days prior to the date construction commences
      ii. of the planned in-service start date, at least 10 days prior to the date the facilities begin to go into service
      iii. of the date on which construction was completed, no later than 10 days following the completion of construction
      iv. of the full project in-service date, no later than 10 days after all the facilities go into service

3. Enbridge Gas Inc. shall obtain all necessary approvals, permits, licences, certificates, agreements and rights required to construct, operate and maintain the Project.

4. Enbridge Gas Inc. shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

5. Enbridge Gas Inc. shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Enbridge Gas Inc. shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.

6. Concurrent with the final monitoring report referred to in Condition 7(b), Enbridge Gas Inc. shall file a Post Construction Financial Report, which shall provide a variance analysis of project cost, schedule and scope compared to the estimates filed in this proceeding, including the extent to which the project contingency was utilized. Enbridge Gas Inc. shall also file a copy of the Post Construction Financial Report in the proceeding where the actual capital costs of the project are proposed to be included in rate base or any proceeding where Enbridge Gas Inc. proposes to

start collecting revenues associated with the Project, whichever is earlier.

7. Both during and after construction, Enbridge Gas Inc. shall monitor the impacts of construction, and shall file with the OEB one electronic (searchable PDF) version of each of the following reports:
   (a) A post construction report, within three months of the full project in-service date, which shall:
      i. provide a certification, by a senior executive of the company, of Enbridge Gas Inc.'s adherence to Condition 1
      ii. describe any impacts and outstanding concerns identified during construction
      iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction
      iv. include a log of all complaints received by Enbridge Gas Inc., including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions
      v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licenses, and certificates required to construct, operate, and maintain the proposed project
   (b) A final monitoring report, no later than fifteen months after the full project in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
      i. provide a certification, by a senior executive of the company, of Enbridge Gas Inc.'s adherence to Condition 4
      ii. describe the condition of any rehabilitated land
      iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction
      iv. include the results of analyses and monitoring programs and any recommendations arising therefrom
      v. include a log of all complaints received by Enbridge Gas Inc., including the date/time the complaint was received; a description of the complaint; any actions taken to address the complaint; and the rationale for taking such actions

8. Enbridge Gas Inc. shall designate one of its employees as project manager who will be the point of contact for these conditions and shall provide the employee's name and contact information to the OEB and to all affected landowners and shall clearly post the project manager's contact information in a prominent place at the construction site.