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October 12, 2023

**Sent by EMAIL, RESS e-filing**

Ms. Nancy Marconi  
Registrar  
Ontario Energy Board  
27-2300 Yonge Street  
Toronto, ON M4P 1E4

Dear Ms. Marconi,

**Re: EB-2022-0246: EPCOR Natural Gas Limited Partnership's ("EPCOR")  
Brockton Leave to Construct – Interrogatory Responses**

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As per procedural order no 1., please find enclosed EPCOR's responses to interrogatories received from OEB Staff (including supplemental IR's), Environmental Defence ("ED") and Enbridge Gas Inc. ("Enbridge").

EPCOR notes that certain supporting information requested for 6-Staff-15a), along with 1-ED-1&2 was unavailable to be completed for this submission, but will provide an undertaking of this information as soon it is compiled.

EPCOR confirms that the interrogatory responses do not include any personal information as defined in the Freedom of Information and Protection of Privacy Act that is not otherwise redacted, in accordance with rule 9A of the Ontario Energy Board's Rules of Practice and Procedure.

Sincerely,

Tim Hesselink, CPA  
Senior Manager, Regulatory Affairs  
EPCOR Natural Gas Limited Partnership  
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**EPCOR Natural Gas Limited Partnership**

**Response to OEB Staff Interrogatories**

**Brockton Community Expansion Project**

**EB-2022-0246**

**October 12, 2023**

## 1-Staff-1

**Ref.:** EPCOR's Natural Gas Expansion Program Proposal<sup>1</sup>

Exhibit A, Tab 2, Schedule 1, Page 2

Exhibit B, Tab 1, Schedule 1, Page 1

Exhibit C, Tab 1, Schedule 1, Page 1

### Preamble

EPCOR Natural Gas LP (EPCOR) stated that the Brockton Natural Gas Expansion Project (Brockton Project) was designed as a community expansion project in response to the Government of Ontario's Access to Natural Gas Act, 2018 and Natural Gas Expansion Program (NGEP) Phase 2. A description of the Brockton Project (including preliminary facility design and estimated Project costs) was submitted to the OEB and the Government of Ontario. On the basis of that proposal, on June 30, 2021, the Government of Ontario announced that the Brockton Project had been selected for funding under Phase 2 of the NGEP.

The original scope of the Brockton Project (as described in EPCOR's NGEP proposal) included approximately 107 km of pipelines to serve 501 customers at a capital cost of \$28.4 million; the grant funding needed to achieve a Profitability Index of 1.0 was \$20.3 million. The original project was intended to serve customers in the Municipality of Kincardine, the Township of Arran-Elderslie, the Municipality of Brockton, the Municipality of West Grey, and the Township of Chatsworth.

In the current application, EPCOR stated that "[i]n early 2023 EPCOR updated the economics of the Project and determined that as a result of industry wide construction and maintenance cost increases in addition to a reduced customer consumption forecast, the project would no longer achieve a Profitability Index ("PI") of 1.0. As an alternative to cancelling the project, EPCOR has modified its scope such that it achieves the economics necessary to achieve a PI of 1.0" and "[i]f the Province authorizes a Phase 3 of the NGEP, EPCOR intends to submit a proposal to construct the remaining elements of the original project."

The revised scope of the Project (as described in the current application) includes approximately 80 km of pipelines to serve 423 customers at a capital cost of \$24.5 million; the grant funding needed to achieve a PI of 1.0 remains \$20.3 million. The

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<sup>1</sup> As filed on November 24, 2020, in EB-2019-0255, Potential Projects to Expand Access to Natural Gas Distribution

rescoped project is intended to serve customers in Kincardine, Arran-Elderslie, Brockton, and West Grey, and no longer includes the Township of Chatsworth.

OEB staff notes that the NGEP funding per customer based on EPCOR's NGEP proposal was approximately \$40,520 and that the NGEP funding per customer based on the current application is approximately \$47,990.

### **Questions**

- a) In EPCOR's view, has there been a material change in the scope of the Brockton Project between its NGEP proposal and the current application? Please explain.

**EPCOR Response:** In EPCOR's view there has not been a material change in scope. Stage 1 of the project will construct 75% of the original km of pipe and is expected to connect 84% of the original scope of customers. During the stakeholder engagement of this project, EPCOR consulted with multiple government agencies, including the Ministry of Energy, the OEB and local provincial members of parliament, who did not object to EPCOR's continuation of this project.

- b) In terms of the remaining elements of the original project, what will EPCOR do if there is no phase 3 of the NGEP?

**EPCOR Response:** There is a high probability that EPCOR would not proceed with the remaining elements as the project would not meet the minimum profitability index ("PI") of 1.



- c) Given that the Brockton Project was selected to receive funding under the NGEF, would EPCOR be willing to file an unredacted version of its NGEF proposal? If not, why not? If so, then please do so.<sup>2</sup>

**EPCOR Response:** Yes, EPCOR is willing to file an unredacted version of its NGEF Proposal with certain limitations. The remaining redactions in the NGEF Proposal comply with the Ontario Energy Board's letter dated October 28, 2020 in that only personal information pursuant to the *Freedom of Information and Protection of Privacy Act* has been redacted. Refer to attachment: ENGLP\_APPL\_Brockton\_20200804\_Redacted 20231012.

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<sup>2</sup> OEB staff notes that Enbridge Gas Inc. filed unredacted versions of its NGEF proposals in the following community expansion proceedings: Selwyn, EB-2022-0156; Mohawks of the Bay of Quinte, EB-2022-0248; Hidden Valley, EB-2022-0249.

## 1-Staff-2

**Ref.:** Exhibit A, Tab 2, Schedule 1, Attachment 2, Page 1  
Exhibit D, Tab 1, Schedule 1, Page 2

### Preamble

EPCOR provides a map that shows the two proposed stages for the Brockton Project (i.e., one stage supported by NGEP Phase 2 and one supported by NGEP Phase 3, if applicable). The map shows several segments of proposed construction (identified using solid blue lines) that overlap with portions of the existing 8-inch steel pipeline along Concession Road 18 / Bruce Road 19 (identified using a solid yellow line).

EPCOR stated that “[s]everal farm taps will be installed off the existing 8-inch steel pipeline to feed customers along this route.”

### Questions

- a) Please confirm that the segments of proposed construction shown as overlapping the existing 8-inch steel pipeline along Concession Road 18 / Bruce Road 19 only involve the installation of farm taps and associated service lines. If not, then please explain.

**EPCOR Response:** The overlapping segments on the 8-inch steel pipeline require installation of farm taps and associated service lines to reach customers. There are two existing stations developed along the 8-inch steel pipeline which were not in place at the time of the NGEP application. One of these stations is being considered for the connection of the minor segment located between Chesley Station and Paisley Station (the two original system interconnects). The second of these stations is located where AR-03 is intended to interconnect to the 8-inch steel pipeline.

- b) Is the Profitability Index for any of the individual farm taps equal to or greater than 1.0? If any of the individual Profitability Indices are greater than 1.0, please explain why EPCOR proposes to include those particular farm taps in stage 2 rather than stage 1?

**EPCOR Response:** Profitability Index calculations for individual farm taps have not been completed.

### 1-Staff-3

**Ref.:** Exhibit B, Tab 1, Schedule 1, Table 2, Page 3  
Exhibit B, Tab 1, Schedule 1, Attachment 1

#### **Preamble**

EPCOR provides the results of a load forecasting survey that was conducted for the Brockton Project and that is dated February 2020.

EPCOR filed its NGEP proposal for the Brockton Project on November 24, 2020.

The current application was filed in June 2023. EPCOR provides a ten-year customer connection forecast in Table 2.

#### **Questions**

- a) Please confirm whether the load forecasting survey informed EPCOR's NGEP proposal for the Brockton Project, which is dated August 2020. If not, please explain.

**EPCOR Response:** Confirmed. The load forecast survey was used to inform the Brockton NGEP Project proposal.

- b) Since the completion of the market research survey, has EPCOR obtained additional or updated information regarding the interest for natural gas service as part of the Brockton Project. Please discuss.

**EPCOR Response:** EPCOR has continued engagement with potential customers the proposed Brockton system network. EPCOR has engaged with potential commercial and seasonal customers for information to confirm customer station requirements and address questions and inquiries via telephone calls. Additionally, another community open house is scheduled for October 18, 2023, to provide the community with updates on the project as well detail about how to engage with EPCOR about signing up for gas service once the project is approved for construction.

- c) What information on the estimated cost savings associated with a conversion to natural gas did EPCOR communicate to participants in the load forecasting survey and how were these estimated cost savings derived? As part of the response, please specifically comment on whether the cost savings were based on 2,200m<sup>3</sup> of consumption or 1,450 m<sup>3</sup> of consumption.

**EPCOR Response:** Through the load forecast survey the following home heating costs and savings information table would have been used to drive further questions and responses depending on how the survey respondent had answered to questions related to their property information.

Cost ratios were based on the fuel prices at the time and based on an average residential volume assumed to be 2,200m<sup>3</sup>, comparing the fuel volumes required to obtain the equivalent amount of heat energy from the fuel each fuel compared with natural gas.

Given the passage of time and the expectation that volumes will now be significantly lower than originally forecast, does EPCOR believe that the findings of the load forecasting survey remain valid for the purposes of the current application?

**EPCOR Response:** The results of the load forecast survey were used to understand and validate potential connection forecast, and not expectations related to volume. EPCOR believes the finding of the load forecasting survey remain valid for the current application as related to connection forecast expectations.

- d) Based on EPCOR's experience to date with the Southern Bruce Project, please discuss whether EPCOR believes the customer attachments from its 2020 survey results are still accurate.

**EPCOR Response:** Load Forecast Survey results from the Brockton Project indicated higher residential connection forecasts than projected during the Southern Bruce Common Infrastructure Plan ("CIP"). At the time no confirming data was available from the Southern Bruce Project to help substantiate this forecast data, as such the residential forecast for Brockton was only increased minimally from the initial Southern Bruce

forecast. A few years into the Southern Bruce Project, residential connections have surpassed the forecast CIP and aligns closer to the survey results from the Brockton Load Forecast Survey.

- e) Did EPCOR conduct a similar load forecasting survey for its Southern Bruce project? If yes, were the methodologies and findings of the surveys consistent? If not, please explain and provide examples of any key differences.

**EPCOR Response:** Yes the methodologies of the survey conducted were consistent.

- f) Please describe EPCOR's plans to ensure that the customer attachments will be realized as forecast for each proposed rate class (e.g., rates 1, 6, 11, 16).

**EPCOR Response:**

1. EPCOR is preparing for a community open house in late October 2023 to provide updates on the Project/Leave to Construct to the Brockton community.
  2. Details regarding service connection sign-ups and service connections following regulatory approvals will be available at this open house to help residential (Rate 1) customers early on in the process.
  3. EPCOR has been engaging with potential Rate 6 and Rate 11 customers on an ongoing basis gathering information on service connection requirement and gathering data related to customer station requirements so that these long lead items can be acquired allowing connection as early as possible in 2024.
- g) Please confirm that, if the Brockton project is approved, the assumptions behind the [EPCOR's online savings calculator](#) will be aligned with the OEB approved assumptions for the Brockton project. If not, please explain.

**EPCOR Response:** If approved, the EPCOR online savings calculator will be updated to align with approved assumptions for the Brockton Project.

## 2-Staff-4

**Ref.:** Exhibit C, Tab 1, Schedule 1, Page 1  
Exhibit F, Tab 1, Schedule 1, Attachment 1, Pages 23 and 35

### Preamble

EPCOR stated that, as the Brockton Project is driven by government legislation or policy, with related funding explicitly aimed at delivering natural gas into communities, work to evaluate facility alternatives such as non-pipeline and hybrid alternatives were not considered. EPCOR did assess routing alternatives.

EPCOR stated that three alternative routes were considered: AR-01, AR-02 and AR-03. EPCOR stated that “additional alternatives were not considered as they were either not economically feasible and/or did not maximize community service hook-ups” and therefore “no other alternatives were considered early in the process.”

EPCOR stated that, after public consultation was complete, additional systems analysis revealed that AR-03 was necessary to connect to the existing station near the intersection of Bruce Road 1 and Bruce Road 20. As a result, AR-03 became part of the Preferred Route.

### Questions

- a) Does EPCOR intend to offer Demand Side Management programs to customers of the Brockton Project, in the future? Please explain.

**EPCOR Response:** EPCOR is currently reviewing the financial feasibility and potential of Demand Side Management as part of its upcoming Aylmer cost of service filing. Should this proceed, EPCOR would then expect to offer similar programs to Southern Bruce customers, which would include Brockton in a secondary phase.

- b) Were any of the “additional alternatives” discussed with stakeholders (e.g., Indigenous communities, municipalities, landowners, OPCC members)? If not, why not?

**EPCOR Response:** Alternatives AR-01, AR-02, AR-03 were presented at the Open House in 2023, as well as in-person with Indigenous Communities, the municipalities and landowners.

The Open House was accessible both in-person and virtually for 2 weeks in order to allow the information to reach as many people as possible.

- c) Please provide a map showing the additional alternatives, similar to the map provided at Exhibit A, Tab 2, Schedule 1, Attachment 1.

**EPCOR Response:** Please refer to Attachment 3-Staff-4 included in this document.

- d) Please provide a table that summarizes an assessment of the additional alternatives, similar to the assessment provided in the Environmental Report, Table 2.1.

**EPCOR Response:** Additional alternatives were considered, but as they did not maximize potential connections, compared with other routings considered they were not viewed as economically feasible. Therefore an assessment of these additional alternatives was not completed.

- e) Please explain why EPCOR's initial systems analysis did not identify the need for AR-03 to connect to the existing station near the intersection of Bruce Road 1 and Bruce Road 20.

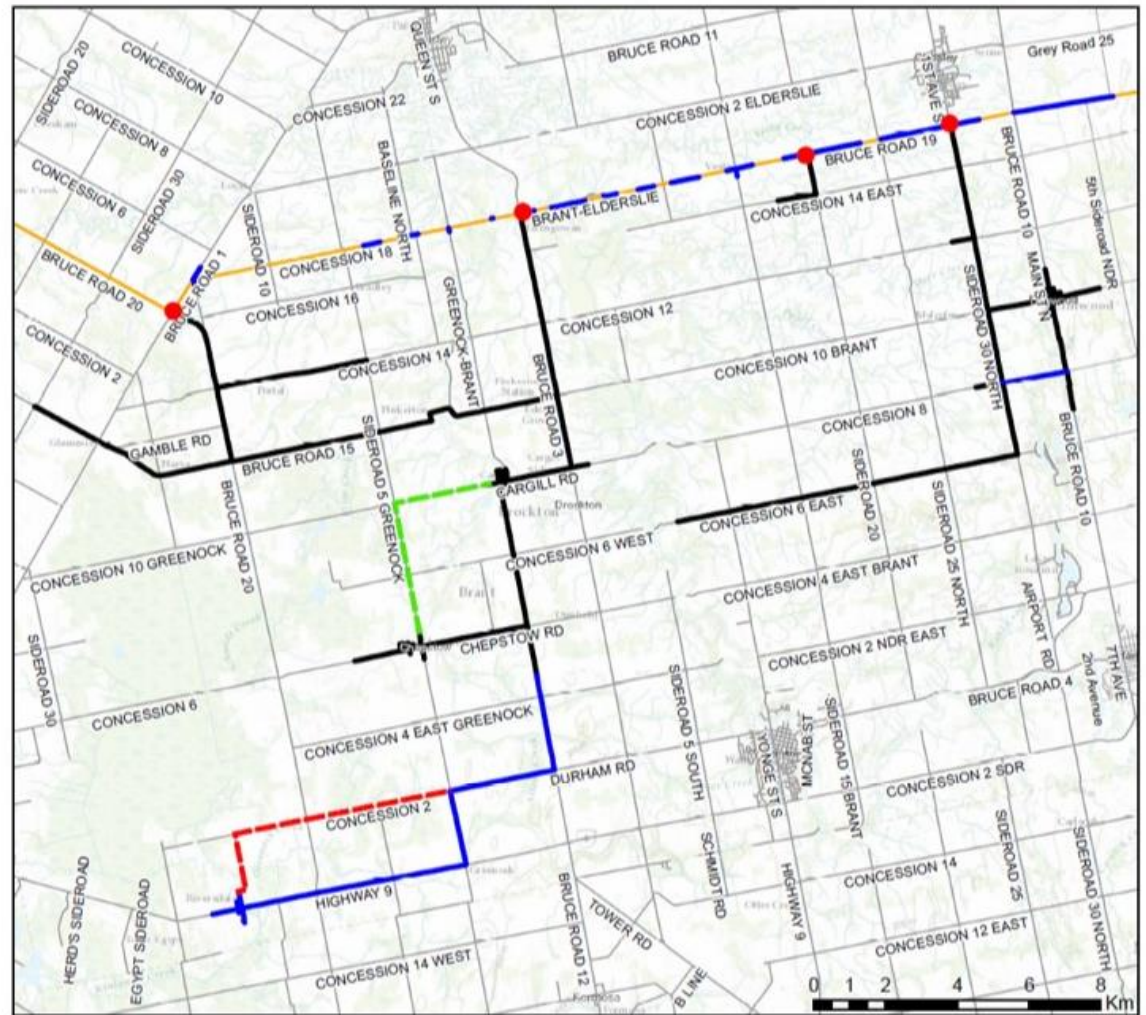
**EPCOR Response:** Initial system modeling did not demonstrate that a supply connection was required in the location of AR-03 and the steel pipeline. At the time of the Brockton NGE application the station at AR-03 and the steel pipeline did not exist. Since the application a station has been built in this location and a connection can be easily installed, providing redundancy of supply to a system segment that has seen commercial and seasonal customer connections further develop beyond what was contemplated at the time of NGE application.





## Brockton Natural Gas Expansion

- Stage 1 – Proposed Route
- Stage 2 – Proposed Route
- Existing Southern Bruce Distribution Line
- System Interconnect
- - - Alternate Route (AR-01)
- - - Alternate Route (AR-02)



Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



### 3-Staff-5

**Ref.:** Exhibit A, Tab 2, Schedule 1, Page 1  
Exhibit D, Tab 1, Schedule 1, Page 1  
Exhibit E, Tab 1, Schedule 1, Page 3  
EPCOR Southern Bruce Project<sup>3</sup>

#### Preamble

EPCOR stated that it, "... now has sufficient data from its adjacent South Bruce system to forecast an annual residential consumption level, which is estimated at 1,450m<sup>3</sup>. This is a reduction from the default value of 2,200m<sup>3</sup> used in the guidelines for potential projects for Phase 2 Natural Gas Expansion program.<sup>4</sup>"

EPCOR stated that, "[t]he DCF analysis for the Brockton Project has been completed based on EPCOR's latest feasibility parameters (e.g. long-term debt rates, OEB discount rates, tax rates etc.). The analysis includes the funding awarded for this expansion through Phase 2 of the NGEP. It also includes the revenue that would be generated if residential usage averages 1,450 m<sup>3</sup> [per year] ...".

EPCOR's latest feasibility parameters were approved by the OEB for use in the Southern Bruce Project that serves the Municipality of Arran-Elderslie, the Municipality of Kincardine, and the Township of Huron-Kinloss. In accordance with the OEB's direction, EPCOR's Common Infrastructure Plan assumed a residential usage average of 2,200 m<sup>3</sup> per year.

EPCOR stated that it is applying to the OEB for "an Order or Orders allowing EPCOR to establish a new variance account called the Brockton Customer Volume Variance Account ("BCVVA") to enable the utility to track the variance in revenue resulting from the difference between forecasted customer volume and the actual customer volume for Rate 1 customers in its Brockton community expansion. With respect to recording carrying charges on the balance in the BCVVA, simple interest will be calculated monthly on the opening balance in accordance with the methodology approved by the Board in EB-2016-0117."

#### Questions

- a) Please confirm that the OEB approved rates for the Southern Bruce Project are based on 2,200 m<sup>3</sup> per year for residential customers. If not, please

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<sup>3</sup> EB-2016-0137 (Arran-Elderslie) | 0138 (Kincardine) | 0139 (Huron-Kinloss)

<sup>4</sup> EB-2019-0255, OEB Final Guidelines Sec. 35 Gas Expansion Ph-II, March 5, Append. A, part 3.3, p. 3

explain.

**EPCOR Response:** Not confirmed. The OEB approved rates for residential (Rate 1) were based on an average annual consumption of 2,149 m<sup>3</sup> for Pre-existing homes and 2,066 m<sup>3</sup> for Future Construction<sup>5</sup>.

- b) Please advise whether the calculated revenues for the Brockton Project in the DCF analysis are based on 2,200 m<sup>3</sup> per year or 1,450 m<sup>3</sup> per year for residential customers.

**EPCOR Response:** The calculated revenues for the Brockton Project in the DCF are based on 1,450 m<sup>3</sup> per year for residential customers.

- c) For Rates 6 and 11, please provide the volumes per customer used to calculate the revenues in DCF analysis and provide rationale supporting these figures.

**EPCOR Response:** For Rate 6 the following volumes per customer are used to calculate the DCF.

**Table 1: Customer Volumes for Rate 6 Customers**

Forecast Customers	Forecast Volume	Total
4	21,146 m <sup>3</sup>	84,584 m <sup>3</sup>
4	26,933 m <sup>3</sup>	107,732 m <sup>3</sup>
3	45,000 m <sup>3</sup>	135,000 m <sup>3</sup>
1	70,000 m <sup>3</sup>	70,000 m <sup>3</sup>
1	150,000 m <sup>3</sup>	150,000 m <sup>3</sup>
Total 13		547,316 m <sup>3</sup>

The volume for Rate 6 customers was forecast primarily through assumptions based on the type of business and connection type. Individual analysis for all Rate 6 customer was not practical given the stage of the project. For some customers, where information could

<sup>5</sup> EB-2018-0264 Southern Bruce Rate Application, April 11, 2019, Exhibit 3, Tab 1, Schedule 1, page 5 of 16 Table 3-3; Customer Consumption Common Parameter.

be gathered, specific Rate 6 customer detail was used to help improve the forecasts. The analysis included a comparison of similar sized customers in the Southern Bruce region.

For Rate 11 the following volumes per customer are used to calculate the DCF

**Table 2: Customer Volumes for Rate 11 Customers**

Customer A	360,000 m <sup>3</sup>
Customer B	95,000 m <sup>3</sup>
Customer C	320,000 m <sup>3</sup>
Customer D	101,499 m <sup>3</sup>
Customer E	180,000 m <sup>3</sup>
Total	1,056,499 m <sup>3</sup>

The volume for individual Rate 11 customers was forecast after discussions with potential customers. These discussions included confirming their interest in transitioning to natural gas, a review of their current propane consumption, the energy ratings of their equipment and a comparison of similar sized customers in the Southern Bruce region.

- d) Please provide a detailed calculation of the revenues by rate class included in the DCF analysis (including the volumes applied for each rate class and a detailed list of the Southern Bruce rates that are included).

**EPCOR Response:** Please refer to additional workbook ENGLP\_IRR\_3-Staff-5.

- e) EB-2016-0117 appears to be an electricity wholesaler licence application by 3500 Steels Avenue East Inc. Please provide the correct case number.

**EPCOR Response:** The correct case number is EB-2006-0117.

### 3-Staff-6

**Ref.:** Exhibit E, Tab 1, Schedule 1, Page 3  
Exhibit E, Tab 1, Schedule 1, Attachment 1 (DCF analysis)  
Exhibit E, Tab 1, Schedule 1, Attachment 2 (DCF assumptions & results)

#### Preamble

EPCOR stated that the Brockton Project has qualified for up to \$20.34 million in NGEF funding, that the DCF analysis treats the funding as a contribution in aid of construction, and that the total capital cost, net of NGEF funding, over the 10-year attachment period is \$24.48 million.

OEB staff notes that a simple sum of the 10-year capital expenditure forecast in Attachment 1 is \$24.28 million. Using the discount rate of 5.66%, OEB staff calculates the NPV of the 10-year capital expenditure forecast to be \$24.16 million.

In its DCF Assumptions and Results summary, EPCR shows the capital costs net of NGEF funding as \$3.94 million. However, OEB staff notes that a total capital cost of \$24.48 million less the maximum NGEF funding of \$20.34 million is \$4.14 million. OEB staff also notes that the NPV of capital costs of \$24.16 million less the maximum NGEF funding of \$20.34 million is \$3.80 million.

#### Questions

- a) Does EPCOR agree that the NPV of the 10-year capital costs is \$24.16 million? If not, please explain.

**EPCOR Response:** No. The capital cost figures in the DCF analysis are not adjusted for inflation in accordance with EBO 188.

- b) Based on current assumptions, estimates and forecasts, what is the net capital cost that EPCOR anticipates it will seek OEB approval to add to its rate base at the time that the project is included in rate (which appears to be at the next rebasing for Southern Bruce based on EPCOR's proposal)?

**EPCOR Response:** Using EPCOR's updated capital cost values (including the costs associated with compliance with the Excess Soil legislation) it anticipates the capital cost to be \$24.73M. The rate base to be added for these capital costs is projected to be \$3.49M (2033 YE) or \$3.93M (2028 YE).

### 3-Staff-7

**Ref.:** Exhibit A, Tab 2, Schedule 1, Page 4  
Exhibit B, Tab 1, Schedule 1, Pages 4-5  
Exhibit E, Tab 1, Schedule 1, Pages 2-4  
OEB Generic Proceeding on Community Expansion<sup>6</sup>  
EPCOR Southern Bruce Project<sup>7</sup>  
EPCOR Southern Bruce Rates and IRM<sup>8</sup>

#### Preamble

In the current application, EPCOR seeks approvals for leave to construct, a variance account, and its forms of land use agreements. EPCOR also seeks confirmation that conditions of approval have been met for certain Municipal Franchise Agreements and Certificates of Public Convenience and Necessity. The application does not list any other requests for approval.

EPCOR stated, "This Project is not dependent on any previously filed leave to construct applications by EPCOR, and has been proposed to expand service within the proximity of the existing Southern Bruce natural gas system into regions currently not serviced by a natural gas utility provider."

EPCOR stated that, "[Brockton] Project customers will be subject to regulated rates in accordance with the Southern Bruce tariff as approved in EB-2018-0264. The most recent custom IR decision for this tariff can be referenced in hearing EB-2022-0184. The primary rationale behind this approach is to support both operational and regulatory efficiencies. While still subject to the LTC threshold, the Brockton expansion is simply an expansion of the existing Southern Bruce gas distribution system and would not benefit from a unique rate zone classification or separate rate structure."

EPCOR stated that if the next rebasing for the Southern Bruce tariff does not align with the 10-year rate stability period for this expansion, then EPCOR intends to include the forecasted customer attachments and capital cost as included in this application. It is expected that at the rebasing subsequent to the end of the 10-year rate stability period that EPCOR will include actual customer attachment and actual capital costs.

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<sup>6</sup> EB-2016-0004

<sup>7</sup> EB-2016-0137 (Arran-Elderslie) | 0138 (Kincardine) | 0139 (Huron-Kinloss)

<sup>8</sup> EB-2018-0264, an application for gas distribution rates and other charges for the period from January 1, 2019 to December 31, 2028

In the Generic Proceeding on Community Expansion, EPCOR (then referred to as South Bruce) submitted that incumbent utilities should be allowed to charge stand-alone rates that are different from their existing rate schedules for an expansion community.

Southern Bruce's approved rate framework has an annual adjustment mechanism and several DVAs.

### Questions

- a) Please confirm EPCOR is not requesting regulatory approval to apply Southern Bruce rates to the Brockton project.
  - i. Please provide rationale as to why EPCOR does not believe it requires approval to apply Southern Bruce rates to Brockton.

**EPCOR Response:** EPCOR is of the understanding that requesting regulatory rate approval is not a specific requirement, unless it is caused by a specific request for stand-alone rates. EPCOR does not believe an 'opt-in' is required, but instead an 'opt-out'. The expansion is mainly within the same CPCN/franchise agreement territory as the Southern Bruce project, is connected to the same pipeline and the respective operations of the expansion will be closely integrated with the initial Southern Bruce project.

In the OEB's generic proceeding on natural gas expansion, certain barriers to expansion are identified, revolving around the concept that existing rate structures do not sufficiently cover the costs of expansion, leading to disadvantages for those willing to invest<sup>9</sup>. The decision with reasons refers to the ability (and justification) as to why stand alone rates may be a better option and should be considered. While this is often the case in some expansions, in this case EPCOR would argue the opposite. The infrastructure will be connected to the Southern Bruce system. A stand-alone rate structure would lead to additional regulatory (multiple filings), commodity pricing (separate transportation agreements and cost arrangements) and even operational (additional wholesale meters to isolate Brockton) costs to be borne by new rate payers.

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<sup>9</sup> EB-2016-0004 - Generic Proceeding on Community Expansion, Decision with Reasons, November 17, 2016, Page 4

- b) Please provide references to any OEB regulatory approvals that enable the application of Southern Bruce rates to Brockton.

**EPCOR Response:** The applicability of the Southern Bruce rates to Brockton is appropriate because this outcome is consistent with prior OEB-approved expansions, Brockton is an extension of an existing system (Southern Bruce) for which just and reasonable rates have already been approved by the OEB, and a stand-alone rate for a community expansion serving 423 customers would create regulatory inefficiencies.

EPCOR's approach of applying Southern Bruce rates to Brockton is similar to Enbridge's process for new community expansions. When Enbridge expands into a new community within an existing franchise area or a new franchise area immediately adjacent to their system, they will use their in-franchise rates (base rates previously approved by the OEB) and an additional System Expansion Surcharge (EB-2020-0094) to all new customers taking additional gas service (see for example, EB-2022-0111, EB-2022-0156]. Similarly, EPCOR is seeking approval to apply its in-franchise rate (Southern Bruce general tariff) while also requesting approval for additional elements that are specific to the Brockton expansion communities.

- c) Please confirm that, in accordance with its decision in the Generic Proceeding on Community Expansion, the OEB could allow stand-alone rates for the Brockton Project.

**EPCOR Response:** Confirmed.<sup>10</sup>

- d) EPCOR stated that Brockton is an expansion of the existing Southern Bruce system and would not benefit from a unique rate zone.
- i. If Brockton is approved to use Southern Bruce rates, upon rebasing of Southern Bruce (i.e., end of Southern Bruce rate stability period), how does EPCOR propose to reconcile these different consumptions volumes in forecasting demand?

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<sup>10</sup> EB-2016-0004 - Generic Proceeding on Community Expansion, Decision with Reasons, November 17, 2016, Page 4

**EPCOR Response:** At the end of the Southern Bruce rate stability period EPCOR intends to use the forecast usage of 1,450 m<sup>3</sup> per Brockton residential customer as the value used in determining revenue generated by those customers. The forecast usage for Southern Bruce customers would be equal to the then current average usage.

- ii. Please advise whether the 10-year rate stability period for Southern Bruce will end in December 2028 or November 2030.

**EPCOR Response:** The rate stability period for Southern Bruce will end December 31, 2028.

- iii. Please advise whether the Southern Bruce Rate Framework (i.e., custom incentive rate making plan) will end in December 2028 or November 2030.

**EPCOR Response:** The Southern Bruce Rate Framework will end on December 31, 2028.

- iv. If the OEB approves a 10-year rate stability period for the Brockton Project, please confirm that rate stability period would end ten years after the Brockton Project goes into service (i.e., when the first customer is attached), which would put the end of the rate stability period in December 2034.

**EPCOR Response:** If the OEB approves a 10-year rate stability period for the Brockton Project, the rate stability period would end ten years after the start of Project construction, currently forecast for April 2024. This would put the end of the rate stability period as sometime in April 2034.

- e) Please confirm that EPCOR designed the Southern Bruce rates based on capital cost, customer attachment, and volume forecasts and other assumptions and inputs that were specific to the Southern Bruce project. Please explain why the assumptions and inputs used to set Southern Bruce rates are applicable to the Brockton Project.

**EPCOR Response:** Confirmed. The Brockton Project is a 423 customer community extension of the Southern Bruce project. It will use Southern Bruce system assets in order



to transport gas from the front end of the system at Dornoch to the various offtake valves that will service the expansion. It also uses Enbridge capacity on their Owen Sound transmission line for which the Southern Bruce utility made a contribution towards.

As an extension of the Southern Bruce system, Brockton will be completely integrated operationally with the Southern Bruce system. As a result it will access the operational systems, processes and other resources of the utility. These resources will be increased on an incremental basis as required to provide service for the entirety of the expanded utility. As a result, many of the cost structures on which the Southern Bruce rates are established are directly applicable to this expansion.

In its application for this Project to the Natural Gas Expansion Program ("NGEP") as submitted to the OEB and then to the MOE, applied the Southern Bruce tariff to customers of the expansion. As a result economics of the Project, including the value of the NGEP grant, are based on the revenue that would be generated by applying all of the elements of that tariff.

- f) Please identify and explain the main pros and cons of extending Southern Bruce rates to the customers of the Brockton Project. As part of the response, please elaborate on any "operational and regulatory efficiencies".

**EPCOR Response:** Please see d) above.

If the Brockton Project was directed to be a separate rate zone it would require the establishment of a segregated utility. Such a designation would materially complicate and/or reduce the ability to share resources between the Southern Bruce utility and the expansion given added requirement to treat each service area as a standalone utility. Regulatory costs also would increase as the expansion would be required to develop, file and support a separate rate case and well as annual IRM filings, all in support of an expansion that is forecast to connect 423 customers.

In addition, if EPCOR were required to file a separate rate case for this Project, the

timeline associated with approval of such an application would be expected to delay start of construction of the Project until at least late IIIQ of 2024, stretching construction into 2025. This would increase the cost of the Project as current unit construction costs are only held for 2024 and other construction related costs would increase. In addition, customer connection would be delayed until system completion sometime in 2025.

This potential loss of efficiency and increase in regulatory and construction costs, plus a reduction in revenue would negatively impact the economics of the Project which currently has a PI = 1.0.

- g) Please confirm that Brockton is seeking the same annual adjustment as Southern Bruce and provide rationale on why it is appropriate to be applied to Brockton.

**EPCOR Response:** Confirmed. It is appropriate for the same annual adjustment to be applied to Brockton as the Southern Bruce annual adjustment<sup>11</sup> is based on a combination of an Ontario specific price index factor as well as a consistent adjustment factor and was deemed by the OEB to be appropriate for the adjacent Southern Bruce system. As with the Southern Bruce utility, applying the same known annual adjustment formula, of which 69% of the adjustment is held constant will provide for rate stability during the 10-year rate stability period.

- h) At the time of Southern Bruce's rebasing, base rates may increase significantly (as the actual volumes may be lower than the originally forecast volumes that underpinned the Southern Bruce Custom IR rates). Would this result in a significant increase for Brockton customers? Why is it appropriate that Southern Bruce's rebasing should affect Brockton customers?

**EPCOR Response:** It is unknown at this time what impact the rebasing of Southern Bruce rates, effective as of January 1, 2029, will be. There will be a number of factors that will directly impact those rates. One of the factors will be forecast customer volume. EPCOR is expecting that the average annual residential customer volume for Southern Bruce may

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<sup>11</sup> EB-2018-0264 Southern Bruce Rate Application, Exhibit 10, Tab 1 Schedule 1, Page 2 and 3 of 7. Incentive Rate Adjustment (IR) =  $[(1.0 - 0.314) \times 0.0127] + [0.314 \times \text{Inflation (I)}]$

increase over time as individual customers connect additional equipment, and in particular water heaters, as their existing equipment requires replacement. In addition, the Customer Volume Variance Account as approved in EPCOR's most recent IRM Application<sup>12</sup> is intended to reduce some of the difference between the initially forecast usage of 2,149 m<sup>3</sup> and actuals.

An additional factor that will materially impact rates as of January 1, 2029 will be O&M costs. Given the similar system age, construction materials, weather, integrated nature of the operations, and other operating factors, O&M costs are expected to be comparable between Southern Bruce and the expansion.

The impact of the rebasing on customers living in the Brockton expansion will be the similar as on customers that live in other expansion areas of Southern Bruce. This includes individual customers and neighborhoods that were not identified in the Common Infrastructure Plan<sup>13</sup>.

- i) At the time of Southern Bruce's rebasing, please confirm that EPCOR intends to include the forecast capital costs and forecast volumes for the Brockton project in rates.

**EPCOR Response:** Confirmed.

- j) Please advise whether the Delay in Revenue rate rider is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The Delay in Revenue rate rider is applicable to Brockton. The intent of this rate rider is to recover revenue that was foregone as a result of changes to certain common assumptions as approved in EPCOR's Rate Application<sup>14</sup> which revenue is necessary to support the Southern Bruce system. Given that the forgone revenue (less

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<sup>12</sup> EB-2022-0184

<sup>13</sup> EB-2016-0137, EB-2016-0138, EB-2016-0139

<sup>14</sup> EB-2018-0264, Updated 2019-04-11, Exhibit 6

certain costs that were also foregone) is necessary to support the Southern Bruce system, of which the Brockton expansion will be an integral part, the application of this rate rider is applicable.

The Delay in Revenue rate rider is included in the DCF analysis as the analysis is based on Southern Bruce rates.

- k) Please confirm that Southern Bruce's Purchased Gas Commodity Variance Account (PGCVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether the rate rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The PGCVA account is applicable to Brockton. The intent of the account is to record the effect of price variances between the actual natural gas commodity purchase price and the forecast prices that underpin the rates charged to customers. As EPCOR would be charging all of its customers the same rate for natural gas consumed and purchasing the necessary volume of natural gas to service those customers any variance between purchase and sale price would be the same.

Revenue and costs associate with commodity purchases are not included in the DCF analysis and as a result this rate rider is not included.

- l) Please confirm that Southern Bruce's Gas Purchase Rebalancing Account (GPRA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The GPRA account is applicable to Brockton. The intent of the account is to record the change in the value of the gas inventory available for sale to service customers due to changes in EPCOR's cost of gas supply. As EPCOR would be charging all of its customers the same rate for natural gas consumed and purchasing the necessary volume of natural gas to service those customers, any variance between purchase and sale price would be the same.

Revenue and cost associate with commodity purchases are not included in the DCF analysis and as a result this rate rider is not included.

- m) Please confirm that Southern Bruce's Storage and Transportation Variance Account Rates 1, 6 & 11 (S&TVA Rates 1, 6 & 11) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The S&TVA Rates 1, 6 & 11 account is applicable to Brockton. The intent of the account is to record the difference between the forecast of all Storage and Transportation rates as included in Southern Bruce's rates and the final Storage and Transportation rate as incurred. As EPCOR will be providing storage and transportation services to all classes of customers, including expansion customers, in the same manner and incurring the same potential variance between costs included in the rates and costs incurred, the account is applicable.

The forecast storage and transportation costs are included in the DCF analysis as the analysis is based on Southern Bruce rates. This account was therefore included in the analysis with an expected value of \$0.0.

- n) Please confirm that Southern Bruce's Transportation Variance Account Rates 16 (TVA Rates 16) is applicable in Brockton and provide rationale on why or why not it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The TVA Rates 16 account is applicable to Brockton. The intent of the account is to record the difference between the forecast of all Transportation rates as included in Southern Bruce's rates and the final Transportation rate as incurred. As EPCOR will be providing transportation services to Rate 16 customers, including expansion customers, in the same manner and incurring the same potential variance between costs included in the rates and costs incurred, the account is applicable.

The forecast transportation costs are included in the DCF analysis as the analysis is

based on Southern Bruce rates. This account was therefore included in the analysis with an expected value of \$0.00. EPCOR does note that there are not currently any Rate 16 customers included in the customer forecast, but this could change over the 10-year rate stability period.

- o) Please confirm that Southern Bruce's Unaccounted for Gas Variance Account (UFGVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The UFGA account is applicable to Brockton. The intent of the account is to record the cost of gas that is associated with volumetric variances between the actual volume of Unaccounted for Gas ("**UFG**") and the UFG volumetric forecast of 0.0 which is incorporated into Southern Bruce rates. Given the similar age, construction methods, weather, materials as well as adjacent location, it is expected that the expansion will have similar UFG.

The forecast UFG is included in the DCF analysis as the analysis is based on Southern Bruce rates and costs associated with UFG will be recorded in this account for the expansion as they are in Southern Bruce. This account was therefore included in the analysis with an expected value of \$0.00.

- p) Please confirm that Southern Bruce's Greenhouse Gas Emissions Administration Deferral Account (GGEADA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The GGEADA account is applicable to Brockton. The intent of the account is to record administrative costs associated with the impacts of the *Greenhouse Gas Pollution Pricing Act*, SC 2018, c 12, s 186 (the "**GGPPA**"). Given the intended integrated nature, and similar customers of Southern Bruce and the Brockton expansion, it is expected that any administrative costs will be similar.

The forecast GGEADA is included in the DCF analysis as the analysis is based on Southern Bruce rates and costs associated with administering the GGPPA will be recorded in this account for the expansion as they are in Southern Bruce.

- q) Please confirm that Southern Bruce's Federal Carbon Charge - Customer Variance Account (FCCCVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The FCCCVA account is applicable to Brockton (Renamed Customer Carbon Charge – Variance Account (CCCVA) as per EB-2021-0268). The intent of the account is to record costs arising from the obligations resulting from the GGPPA associated with natural gas that EPCOR delivers to its customers. EPCOR records the variances between actual customer related GGPPA costs and customer related GGPPA costs recovered in rates for distribution volumes delivered by EPCOR.

The forecast FCCCVA is included in the DCF analysis as the analysis is based on Southern Bruce rates. The costs arising from obligations resulting from the GGPPA will be the same whether the customer is located in Southern Bruce or the Brockton expansion.

- r) Please confirm that Southern Bruce's Federal Carbon Charge - Facility Deferral/ Variance Account (FCCFVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The FCCFVA account is applicable to Brockton (Renamed Facility Carbon Charge – Variance Account (FCCVA) as per EB-2021-0268). The intent of the account is to record costs arising from the obligations resulting from the GGPPA associated with EPCOR's operational facilities. EPCOR records the variances between actual facility related GGPPA costs and Facility related GGPPA costs recovered in rates.

The forecast FCCFVA is included in the DCF analysis as the analysis is based on



Southern Bruce rates. Given the intended integrated nature of the operations of Southern Bruce and the Brockton expansion, each area will be using the expanded utility's facilities in a proportional basis.

- s) Please confirm that Southern Bruce's Municipal Tax Variance Account (MTVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The MTVA is applicable to the Brockton expansion. The intent of the MTVA is to record any impacts resulting from changes in municipal tax rates or levies, or the introduction of any new municipal tax or levies that occur during the period covered by the approved rates. As the municipalities in which the Brockton expansion will operate do levy linear taxes on distribution pipelines there may be a variance (positive or negative) between what is included in the DCF analysis and what is actually levied during the 10-year rate stability period. This account will address any over or under forecast of those taxes.

This account was included in the analysis with an expected value of \$0.00.

- i. How does EPCOR propose to address cross-subsidization between Southern Bruce and Brockton projects in the MTVA?

**EPCOR Response:** EPCOR does not expect there to be any material cross-subsidization between Southern Bruce and the Brockton projects in the MTVA. The Brockton expansion will depend on certain elements of the Southern Bruce distribution system and it is therefore appropriate that those customers should share in the costs associated with the construction and operation of that system.

In addition, all segments of the expanded Southern Bruce system (the initial Southern Bruce system and all expansions not included in the Common Infrastructure Plan such as the Brockton expansion) are subject to linear municipal taxes and the cost on a per customer basis will be dependent on the specific municipal tax and the density of



customer connections per km of distribution system, both factors which will change over time. Given the integrated nature of the expanded system, and the fact that many segments of it operate in the same municipalities, it would not practical, or reflect general rate making principles, to attempt to develop a tariff that would attempt to determine a specific MTVA charge for individual customers

- t) Please confirm that Southern Bruce's Energy Content Variance Account (ECVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The ECVA is applicable to the Brockton expansion. The intent of the ECVA is to record any variations in revenues and costs resulting from differences in the energy content of the gas actually delivered and the assumed energy content. The assumed energy content is 38.89 MJ/M<sup>3</sup>. As EPCOR will be purchasing gas as necessary for all customers in the expanded Southern Bruce system, and the forecast residential usage is based on Southern Bruce actuals, any such variance will be the same.

Revenue and cost associated with commodity purchases are not included in the DCF analysis and as a result this account is not included.

- u) Please confirm that Southern Bruce's Contribution in Aid of Construction Variance Account (CIACVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The CIACVA is applicable to the Brockton expansion. The intent of the CIACVA is to record the difference between the \$5.298 million capital contribution to Enbridge related to Enbridge's Owen Sound Transmission Reinforcement and the Dornock Meter and Regulator station that EPCOR included in the EB-2018-0264 Rate Application and actuals. As the Brockton expansion will use those assets in order to transport natural gas to its customers it is reasonable that those customers pay a proportionate share of the costs.

The forecast CIACVA is included in the DCF analysis as the analysis is based on Southern Bruce rates.

- i. The CIACVA was due in part to Enbridge Gas's construction cost to serve Southern Bruce, please provide rationale as to why this would also apply to Brockton.

**EPCOR Response:** As detailed in t) above, Brockton customers will use the assets that are covered by the CIACVA in order to access natural gas. It is therefore reasonable that those customers are subject to the CIACVA. In addition, the DCF of the expansion includes the revenue associated with the account.

- v) Please confirm that Southern Bruce's External Funding Variance Account (EFVA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The EFVA is applicable to the Brockton expansion. The intent of the EFVA is to record the any difference in timing and quantum of external funding available to the Southern Bruce versus the forecast included the EB-2018-0264 Rate Application. As customers of the Brockton expansion use elements of the initial Southern Bruce system that was funded by external funding sources in order to transport natural gas it is reasonable that the account be applied to them.

The DCF analysis is based in Southern Bruce rates and therefore the EFVA is included in that analysis.

- i. How does EPCOR propose to address cross-subsidization since the Southern Bruce and the Brockton projects are two different projects?

**EPCOR Response:** EPCOR does not consider there to be any material cross-subsidization between customers of the Southern Bruce and Brockton projects as it relates to the EFVA. The Brockton project is a tightly integrated expansion that uses

certain elements of the initial Southern Bruce system that are supported by the external funding addressed in the EFVA. Depending on their location, all customers of the expanded Southern Bruce system use a definitive, but different, percent of the entire system that was supported by the external funding. As a result, each will be able to benefit from some level of subsidization, such level of subsidization is dependent on their location rather than whether they are connected to the initial Southern Bruce system or any of its expansions.

- w) Please confirm that Southern Bruce's Approved Deferral/Variance Disposal Account (ADVADA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The ADVADA is applicable to the Brockton expansion. The intent of this account to track the collection/refund of all deferral and variance accounts against the balances which have been approved for disposition. The ADVADA will allow any over or under collection/refund on ENGLP's deferral and variance account balances which have been approved for disposition to be tracked and accounted for in the same manner as Account 1595 (Disposition and Recovery/Refund of Regulatory Balances Control Account) as per the Uniform Chart of Accounts for Electricity Distributors.

The ADVDA is included in the DCF analysis as the analysis is based on Southern Bruce rates.

- x) Please confirm that Southern Bruce's Order Revenues Deferral Account (ORDA) is applicable in Brockton and provide rationale on why it is appropriate to be applied to Brockton. Please also advise whether this rider is included in the DCF analysis for the Brockton Project.

**EPCOR Response:** The ORDA is applicable to the Brockton expansion. The intent of the ORDA is to record customer service charge revenue amounts (as per the schedule of Miscellaneous and Service Charges on the Distributors approved rate order). As part of its 10-year rate stability period, EPCOR was approved to collect specific service charges

as part of the Settlement Proposal. The OEB approved \$0 in Other Revenues for ratemaking purposes for the periods of 2019-2021 and the establishment of a deferral account to track actual other revenues for the remaining years of the rate stability period.

The ORDA is included in the DCF analysis as the analysis is based on Southern Bruce rates.

- y) Are there any other deferral or variance accounts that have not yet been mentioned and EPCOR is seeking approval for?
  - i. Please provide rationale on why it would be appropriate to apply it to Brockton.

**EPCOR Response:** EPCOR is seeking approval for the Brockton Customer Volume Variance Account and the Excess Soil Variance Account which are specific to the Brockton expansion. A rationale regarding the Brockton Customer Volume Variance Account is available at Exhibit J, Tab 1, Schedule 1 in EPCOR's amended application and additional information can be found in responses to interrogatories at the answer to question (a)(a) below. A rationale regarding the Brockton Excess Soil Variance Account is available at Exhibit K, Tab 1, Schedule 1 in EPCOR's amended application and additional information can be found in responses to interrogatories 3-Staff-17 through 3-Staff-19.

- z) For the above deferral and variance accounts, how does EPCOR expect to dispose of the accounts? Will each service area have its own rate rider or would they be the same rate rider between Southern Bruce and Brockton?

**EPCOR Response:** Given the tightly integrated nature of the expanded Southern Bruce utility, EPCOR expects to have the same rate rider on customers of the initial Southern Bruce system as well as all expansions such as the Brockton Expansion. EPCOR expects to file a single annual IRM application that will include addressing disposal of the combined deferral and variance accounts. This aligns with the stated desire to enable regulatory efficiencies.

aa) Does EPCOR agree that if it were to develop stand-alone rates specific to the Brockton Project then a Brockton Customer Volume Variance Account (BCCVA) may not be necessary. Please explain.

**EPCOR Response:** EPCOR does not agree that if it were to develop stand-alone rates specific to the Brockton Project then the BCCVA may not be necessary. The intent of the BCCVA is to address any variance in consumption by residential customers over or under the forecast annual average consumption of 1,450m<sup>3</sup> that is reflected in the economics of the expansion. The need to address such a variance is not dependent on whether the Southern Bruce tariff is applied, but is a function of the uncertainty associated between forecast and actual consumption of that customer group.

### 3-Staff-8

**Ref.:** Exhibit J, Tab 1, Schedule 1

#### **Preamble**

EPCOR proposed the following in its BCVVA:

The effective date of this account is June XX, 2023. Toward the end of the rate stability period, the forecasted annual consumption (currently 1,450m<sup>3</sup>) will be revised to reflect the then current value. This revised value will be brought forward to the Board for approval and replace 1,450m<sup>3</sup> in this accounting order at the end of the rate stability period.

The NACV shall be calculated as the actual average monthly consumption per customer, adjusting it to remove the impact of the Energy Content Variance Account (ECVA), and applying the weather normalization methodology.

The monthly balance to be recorded in this account will be calculated as the variance in revenue resulting in the difference between 1,450m<sup>3</sup> and the Normalized Average Customer Volume (NACV), both determined in the applicable manner described above for Rate 1 customers. The revenue difference shall be calculated by applying approved rate schedules (including volumetric charges, monthly fixed charges and the delay in revenue rate rider) to the calculated difference between 1,450m<sup>3</sup> and the NACV.

#### **Questions**

- a) Does EPCOR expect to continue the BCVVA after the rate stability period ends for Brockton?

**EPCOR Response:** Yes. EPCOR expects to continue the BCVVA after the rate stability period.

- i. How does EPCOR propose to revise the 1,450 m<sup>3</sup>/year currently proposed once the rate stability period has ended (i.e. through an IRM, CoS, standalone application)?

**EPCOR Response:** EPCOR proposes to include a revision to the 1,450 m<sup>3</sup> currently proposed, that reflects the then average consumption, in the future CoS that will address

rates in the period subsequent to the rate stability period.

- ii. If EPCOR expects the BCVVA to continue after the rate stability period, please provide rationale for the continuity of the account.

**EPCOR Response:** After the rate stability period it is expected that there will continue to be a variance between the forecast and actual annual consumption of residential customers. This variance can be positive or negative and could result in either a refund or charge to customers. As detailed in the application for this account<sup>15</sup>, the risk of gains or losses as the result of differences between forecast and actual volume of natural gas consumed is generally not a variance that utilities are exposed to. Continued access to the BCVVA would align EPCOR with Enbridge and its Normalized Average Consumption account.

- iii. Would it be EPCOR's plan to merge the CVVA of Southern Bruce with the BCVVA?

**EPCOR Response:** Yes, in a future rate proceeding.

- b) How is the NACV calculated when compared to what was proposed in the latest version of the CVVA?

**EPCOR Response:** Assuming this question is referring the Enbridge's Normalized Annual Consumption Variance account, a detailed comparison can be found here:

EB-2022-0184 (Phase 2), EPCOR IRs to OEB Staff (September 19, 2022), pp.8-9 36

EB-2022-0184 (Phase 2), EPCOR Additional Evidence, Appendix A – CVVA Process Document (November 14, 2022)

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<sup>15</sup> EB-2022-0246 Exhibit J, Tab 1, Schedule 1, Page 3 of 5, para 9

c) Please explain why the BCVVA is only applicable to Rate 1 customers.

**EPCOR Response:** The BCVVA is not applicable to Rate 6 or Rate 11 customers as each of those classes has a limited number of forecast connections and a material difference in the expected range of usage. As an example, as detailed in 3-Staff-5 (c) above, there are 5 forecast Rate 11 customers with an expected annual consumption per customer of between 95,000 m<sup>3</sup> and 360,000 m<sup>3</sup>. Given the expected number connections, any material variance in consumption, especially by one of the larger customers, could result in a material revenue shortfall, or surplus, recorded in the account. This would then have a material impact on all customers in that rate class, even if the remaining customers achieved their forecast consumption. In order to reduce the potential for such a material impact on customers in that class, EPCOR would almost have to request a separate account for each customer. Such an outcome would have the effect of each customer guaranteeing their annual volume, an outcome that would not be reflective of the general conditions of that rate class.



### 3-Staff-9

**Ref.:** Exhibit E, Tab 1, Schedule 1, Pages 1-4

#### **Preamble**

EPCOR provides the estimated capital cost of the Brockton Project, which totals approximately \$24.475 million. The cost estimate includes a contingency of 18% on all direct costs.

EPCOR stated that the American Association of Cost Engineering estimation standard as well as internal EPCOR capital cost estimation policy were used as a guide, along with EPCOR's experience in installing distribution network in close proximity to the Project over the past three years for the Southern Bruce expansion.

EPCOR intends to utilize the same contractor, similar project team and resources to execute the Proposed Project as it has engaged with the Southern Bruce, and other projects. EPCOR will utilize best practices of project monitoring and project controls. EPCOR has based the Brockton Project capital costs on a fixed unit price contract that it is in the process of completing with its contractor for the Proposed Project.

#### **Questions**

- a) Based on a combined total of 80.1 km for the proposed 4-inch and 2-inch polyethylene pipelines, OEB staff estimates the unit cost for the Brockton Project to be approximately \$305.50 per metre.<sup>16</sup> Please provide the actual average unit cost to install any 4-inch and 2-inch polyethylene pipelines on the Southern Bruce Project. If this unit cost cannot be provided, please:
  - i. Explain why not
  - ii. Provide alternate information that quantifies the actual cost to install 4-inch and 2-inch polyethylene pipelines on the Southern Bruce Project and comment on how it compares to the estimated unit cost for the Brockton Project

**EPCOR Response:** EPCOR will not be able to provide specifics about the installation cost associated with 4-inch and 2-inch polyethylene pipelines. EPCOR works with

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<sup>16</sup> \$24,475,000 / 80,100 m = \$305.50 / m

contractors to install the liner infrastructure and the associated cost for installation of 4-inch and 2-inch polyethylene pipelines is a commercially sensitive information.

- b) Has EPCOR executed a fixed unit price contract with the contractor? If not, then please explain why not? If so, were there any developments between the filing of the current application and the execution of the contract that would materially affect the estimated capital cost of the Brockton Project? If so, please quantify and explain the changes.

**EPCOR Response:** EPCOR has executed a fixed unit price Master Services Agreement with the contractor performing the installation for the Brockton Project. Since the filing of the LTC application, EPCOR does not foresee an impact to the estimated capital cost for the Brockton Project.

There has not been any material development since the submission of the revised application of September 19, 2023, which includes an amendment for the Excess Soil Variance Account.

#### 4-Staff-10

**Ref.:** Exhibit D, Tab 1, Schedule 1, Pages 3-4 and 7  
Exhibit F, Tab 1, Schedule 1, Attachment 1, Page 182

#### Preamble

EPCOR provides the technical specifications of the pipelines and stated that there are no deviations from CSA Z662:19 or any other applicable standards anticipated for the proposed project.

EPCOR stated that it will provide the Technical Standards and Safety Authority (TSSA) a copy of the detail design of the proposed facilities once finalized. EPCOR stated that it will file a risk assessment to the TSSA in accordance with CSA Z662 Annex B once the facilities detail designs are finalized. As recorded in the Environmental Report's communication log, the TSSA informed EPCOR that an [Application for Review of a Pipeline Project](#) must be submitted to the TSSA.

#### Questions

- a) Has EPCOR submitted a risk assessment to the TSSA in accordance with CSA Z662 Annex B? If so, please file a copy of the TSSA's response. If the TSSA's response cannot be provided, then please explain why not.

**EPCOR Response:** EPCOR has not yet submitted a risk assessment to TSSA. EPCOR is currently at a preliminary design level where only the initial alignment is designed. Consistent with previous projects, EPCOR intends to submit the risk assessment to TSSA after the design has reached 90% completion.

- b) Has EPCOR submitted an Application for Review of a Pipeline Project to the TSSA? If so, please file a copy of the TSSA's response. If the TSSA's response cannot be provided, then please explain why not.

**EPCOR Response:** EPCOR has not yet submitted the application for Review of Pipeline Project to TSSA. EPCOR is currently at a preliminary design level where only the initial alignment is designed. EPCOR intends to submit the Application for Review of a Pipeline Project along with the risk assessment to TSSA, after the design has reached 90% completion. This is expected to be submitted before the end of 2023.

#### 4-Staff-11

**Ref.:** Exhibit F, Tab 1, Schedule 1, Page 3

##### **Preamble**

EPCOR stated that during the consultation process for development of the Environmental Report (ER), comments were received from identified Indigenous communities, the public, interest groups, and provincial agencies. No comments were received from federal agencies or interest groups, as of the writing of the ER.

EPCOR stated it would update the OEB regarding the Ontario Pipeline Coordinating Committee (OPCC) review process of the ER if further comments or requests for information are submitted.

##### **Questions**

- a) Have any comments been received from federal agencies or interest groups since the writing of the ER? If so, please file an updated correspondence log (i.e., Exhibit F, Tab 1, Schedule 1, Attachment 1, Appendix B6).

**EPCOR Response:** No comments have been received since the writing of the ER.

- b) Please provide any update on comments or requests from the OPCC since the ER was completed.

**EPCOR Response:** No comments have been received since the completion of the ER.

#### **4-Staff-12**

**Ref.:** Exhibit F, Tab 1, Schedule 1, Attachment 1, Page 2

##### **Preamble**

The Environmental Report includes a Sign-off Sheet that has not been signed.

##### **Questions**

- a) Please file an executed copy of the Sign-off Sheet. If any signatories require changes to the Environmental Report in order to obtain their signatures, please file the updated Environmental Report with a cover letter that summarizes the changes.

**EPCOR Response:** Please refer to Attachment 4-Staff-12 included in this document.

## Sign-off Sheet

This document entitled Brockton Natural Gas Expansion Project: Environmental Report was prepared by (“Stantec”) for the account of EPCOR Natural Gas Limited Partnership (the “Client”). The conclusions in the Report are Stantec’s professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient’s own risk.

Stantec has assumed all information received from the Client and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

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Jahangir, Sabriya  
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(signature)

**Sabriya Jahangir, B.Sc.Env.**  
Environmental Planner

Reviewed by 

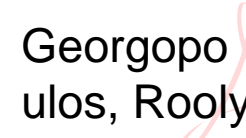
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**Mark Knight, MA, MCIP, RPP**  
Senior Associate, Environmental Services

Prepared by 

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**Michael Candido, B.Sc.Env.**  
Project Manager

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Georgopoulos, Rooly  
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**Rooly Georgopoulos, B.Sc.**  
Principal, Environmental Services



#### **4-Staff-13**

**Ref.:** Exhibit F, Tab 1, Schedule 1, Attachment 1, Page 177

##### **Preamble**

In its summary of Grey County's comments, EPCOR recorded that the proposed works fall generally within existing road allowances and that "[t]he County reiterated the agreement EPCOR has with County of Grey."

##### **Questions**

- a) Please confirm that the agreement being referred to is the Municipal Franchise Agreement with Grey County. Otherwise, please explain.

**EPCOR Response:** Confirmed.

#### **4-Staff-14**

**Ref.:** Exhibit F, Tab 1, Schedule 1, Attachment 1, Pages 18, 69, 87 and 285

##### **Preamble**

The Stage 1 Archaeological Assessment (AA) determined that approximately 90% of the Study Area retains potential for the recovery of archaeological resources. A Stage 2 AA is recommended for these areas prior to construction.

A Cultural Heritage Checklist was completed by Stantec for the Brockton Project prior to submission of EPCOR's application. As a result, it was recommended that a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHR) be completed. EPCOR stated that the CHR will be undertaken.

##### **Questions**

- a) Please provide an update on the Stage 2 AA.
- b) Please provide an update on the CHR.

**EPCOR Response:** EPCOR has engaged Stantec for completing both Stage 2AA and CHR for the Brockton Project, with the intent to have both completed prior to start of any construction on site. Stantec plans to complete field assessments in 2023, with the reports being finalized after that.



## 6-Staff-15

**Ref.:** Exhibit H, Tab 1, Schedule 1

### **Preamble**

Prior to receiving the Ministry of Energy's (MOE) Duty to Consult delegation letter, EPCOR contacted First Nation and Métis communities with which it had previous engagements in the area of the proposed Brockton Project. There were four communities:

1. Saugeen First Nation
2. Chippewas of Nawash Unceded First Nation
3. Métis Nation of Ontario Great Lakes Métis Council
4. Historic Saugeen Métis

EPCOR received the MOE's delegation letter on May 30, 2022, that identified two Indigenous communities that EPCOR should consult in relation to the Brockton Project. The MOE added a third community on January 10, 2023. The three communities were:

1. Saugeen First Nation
2. Chippewas of Nawash Unceded First Nation
3. Georgian Bay Historic Metis Community (represented by the Metis Nation of Ontario)

EPCOR states that the First Nations and Métis communities developed into three specific engagement groups:

1. Saugeen Ojibway Nation (representing the Saugeen First Nation and the Chippewas of Nawash Unceded First Nation)
2. Georgian Bay Traditional Territory Consultation Committee (representing the Métis Nation of Ontario and the Métis communities that hold traditional rights in the project area)
3. Historic Saugeen Métis

EPCOR stated that it continues to have conversations with these First Nations and Métis communities.

The MOE will review EPCOR's consultation with Indigenous groups potentially affected by the Brockton Project and provide an opinion as to whether EPCOR's consultation has been sufficient. EPCOR stated that the MOE's sufficiency letter will be filed with the OEB once it has been received by EPCOR.

### Questions

- a) Please provide an update on Indigenous consultation activities with the various communities listed above. As part of the response, please summarize any issues and concerns raised and how these are being addressed. Please include copies of any supporting documentation (e.g., email correspondence).

**EPCOR Response:** An update on Indigenous consultation activities can be reviewed in the following attachment: ENGLP\_IRR\_6-Staff-15. Due to a change in staffing, EPCOR is unable to provide the supporting documentation detail at this time, but will provide an undertaking of this information as soon it is compiled.

- b) Please provide an update on any correspondence between the Ministry of Energy and EPCOR since the application was filed, regarding the Ministry of Energy's review of EPCOR's consultation activities.

**EPCOR Response:** EPCOR has initiated the request with MOE regarding the review of EPCOR's consultation activities for the Project. EPCOR is currently awaiting response to this request.

- c) Please indicate when EPCOR expects to receive the MOE's sufficiency letter.

**EPCOR Response:** EPCOR is working diligently towards receiving the MOE's sufficiency letter. At this time, EPCOR does not have an indication on when the sufficiency letter will be received.

# INDIGENOUS CONSULTATION REPORT

**PROJECT:** EPCOR BROCKTON NATURAL GAS EXPANSION PROJECT (2022 – 2023)

**INDIGENOUS NATIONS AND COMMUNITIES:** SAUGEEN OJIBWAY NATION (SAUGEEN FIRST NATION AND CHIPPEWAS OF NAWASH UNCEDED FIRST NATION), METIS NATION OF ONTARIO (GBTTCC), AND HISTORIC SAUGEEN METIS

Date & Time	Ref. no.	Title	Indigenous Nation/Community	Project Team	Type of communication	No. of participants
07-03-22 15:49	C-15853	Connecting with SON: EPCOR Natural Gas Limited Partnership (ENGLP)	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns	Email	4
07-03-22 15:54	C-15850	Connecting with HSM: EPCOR Natural Gas Limited Partnership (ENGLP)	Chris Hachey	Jed Johns	Email	2
07-03-22 15:59	C-15851	Connecting with MNO: EPCOR Natural Gas Limited Partnership (ENGLP)	Jesse Fieldwebster Karen Heisler	Jed Johns	Email	3
08-03-22 09:26	C-15969	Re: Connecting with HSM: EPCOR Natural Gas Limited Partnership (ENGLP)	Chris Hachey	Jed Johns	Email	2
18-03-22 11:01	C-16158	RE: Connecting with MNO: EPCOR Natural Gas Limited Partnership (ENGLP)	Karen Heisler Justin Hunt - Metis Nation of Ontario	Jed Johns	Email	3
18-03-22 11:46	C-16159	RE: Connecting with MNO: EPCOR Natural Gas Limited Partnership (ENGLP)	Karen Heisler Justin Hunt - Metis Nation of Ontario	Jed Johns	Email	3
24-03-22 11:00	C-16391	Brockton Expansion Project Introduction to Historic Saugeen Metis (HSM)	Chris Hachey Historic Saugeen Metis	Jed Johns Kevin Sonnenberg Thomas Stachowski	Meeting	3
30-03-22 13:30	C-16582	Brockton Expansion Project Introduction to Metis Nation of Ontario (MNO)	Karen Heisler Metis Nation of Ontario Justin Hunt - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Meeting	5

Date & Time	Ref. no.	Title	Indigenous Nation/Community	Project Team	Type of communication	No. of participants
30-03-22 14:26	C-16583	Brockton Natural Gas Expansion Project - EPCOR Utilities Inc.	Karen Heisler Justin Hunt - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Email	4
30-03-22 14:33	C-16584	Follow-up: EPCOR & HSM - Brockton NG Presentation	Chris Hachey Historic Saugeen Metis Hsmcentre -	Jed Johns Kevin Sonnenberg Thomas Stachowski	Email	6
06-04-22 11:00	C-16713	Brockton Expansion Project Introduction to Saugeen Ojibway Nation (SON) - Virtual Meeting	Saugeen Ojibway Nation (SON) Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns Kevin Sonnenberg Thomas Stachowski	Meeting	1
03-06-22 14:19	C-18337	Meeting Request - In-Person : EPCOR Natural Gas Limited Partnership (ENGLP)	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns	Email	4
08-06-22 14:49	C-18429	RE: Meeting Request - In-Person : EPCOR Natural Gas Limited Partnership (ENGLP)	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns	Email	4
14-06-22 15:37	C-19788	1012961 - EPCOR Natural Gas Limited Partnership – Brockton Community Expansion Project, Notice of Study Commencement	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Michael Candido Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski	Email	6
14-06-22 15:37	C-18568	1012961 - EPCOR Natural Gas Limited Partnership – Brockton Community Expansion Project, Notice of Study Commencement	Karen Heisler Justin Hunt - Metis Nation of Ontario Michael Candido	Jed Johns Thomas Stachowski	Email	5
14-06-22 15:37	C-18569	1012961 - EPCOR Natural Gas Limited Partnership – Brockton Community Expansion Project, Notice of Study Commencement	Chris Hachey Historic Saugeen Metis Michael Candido	Jed Johns Thomas Stachowski	Email	6
28-06-22 09:00	C-19311	Meeting with Historic Saugeen Metis and EPCOR re Brockton NG Expansion Project	Historic Saugeen Metis	Jed Johns Kevin Sonnenberg Thomas Stachowski	Meeting	4
28-06-22 13:00	C-19379	Meeting with Saugeen Ojibway Nation (SON) and EPCOR re Brockton NG Expansion Project	Saugeen Ojibway Nation (SON) Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns Kevin Sonnenberg Thomas Stachowski	Meeting	6

Date & Time	Ref. no.	Title	Indigenous Nation/Community	Project Team	Type of communication	No. of participants
			Riel Warrilow - Saugeen Ojibway Nation (SON)			
29-06-22 08:00	C-19380	Meeting with Metis Nation of Ontario (MNO) and EPCOR re Brockton NG Expansion Project	Karen Heisler	Jed Johns Kevin Sonnenberg Thomas Stachowski	Meeting	4
15-07-22 14:59	C-19391	Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Karen Heisler	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	5
15-07-22 15:00	C-19392	Follow-up with HSM from June 28 Meeting with EPCOR re Brockton NG Project	Chris Hachey Historic Saugeen Metis	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	7
15-07-22 15:00	C-19393	Follow-up with SON from June 28 Meeting with EPCOR re Brockton NG Project	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	7
20-07-22 10:53	C-19606	Re: Natural Gas-EPCOR Brockton Community Expansion	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	8
21-07-22 11:51	C-19607	RE: Natural Gas-EPCOR Brockton Community Expansion	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	7
03-08-22 10:36	C-19893	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Karen Heisler Ethan Roy - Metis Nation of Ontario	Jed Johns	Email	3
09-08-22 16:51	C-20011	RE: Meeting: GBTCC-EPCOR Natural Gas Limited Partnership – Brockton Community Expansion Project	Ethan Roy - Metis Nation of Ontario	Jed Johns	Email	2
09-08-22 16:52	C-20012	RE: Follow-up with HSM from June 28 Meeting with EPCOR re Brockton NG Project	Chris Hachey	Jed Johns	Email	2

Date & Time	Ref. no.	Title	Indigenous Nation/Community	Project Team	Type of communication	No. of participants
10-08-22 17:02	C-20050	RE: Natural Gas-EPCOR Brockton Community Expansion	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	7
10-08-22 17:02	C-21158	RE: Natural Gas-EPCOR Brockton Community Expansion	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	7
26-08-22 12:11	C-21159	EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Chief Lester Anoquot	Jed Johns Thomas Stachowski	Email	4
26-08-22 12:14	C-21160	EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Chris Hachey (HSM)	Jed Johns Thomas Stachowski	Email	4
26-08-22 12:19	C-21161	EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski	Email	4
26-08-22 12:23	C-21162	EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Saugeen First Nation	Jed Johns Thomas Stachowski	Email	4
26-08-22 12:35	C-21163	FW: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Chief Lester Anoquot Saugeen First Nation	Jed Johns Thomas Stachowski	Email	5
04-10-22 16:59	C-20919	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Karen Heisler Ethan Roy - Metis Nation of Ontario	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	6
18-10-22 08:58	C-21130	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Karen Heisler Ethan Roy - Metis Nation of Ontario	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	6
18-10-22 15:33	C-21157	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns Thomas Stachowski	Email	6

Date & Time	Ref. no.	Title	Indigenous Nation/Community	Project Team	Type of communication	No. of participants
18-10-22 15:51	C-21166	RE: Brockton Natural Gas Expansion Project - Draft Environmental Report Comments	Chris Hachey	Jed Johns Thomas Stachowski	Email	3
24-10-22 14:23	C-21240	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Karen Heisler Ethan Roy - Metis Nation of Ontario	Jed Johns Thomas Stachowski Kevin Sonnenberg	Email	6
24-10-22 14:30	C-21241	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Saugeen Ojibway Nation (SON)	Jed Johns	Email	3
15-11-22 15:37	C-21741	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Karen Heisler Ethan Roy - Metis Nation of Ontario	Jed Johns	Email	3
15-11-22 16:08	C-21742	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Riel Warrilow - Saugeen Ojibway Nation (SON) Emily Martin - Saugeen Ojibway Nation (SON)	Jed Johns	Email	4
14-12-22 10:22	C-22273	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns	Email	2
20-01-23 09:30	C-22696	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Email	3
31-01-23 13:27	C-22878	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns	Email	2
31-01-23 13:29	C-22879	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario	Jed Johns	Email	2
31-01-23 13:49	C-22888	EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns	Email	3

Date & Time	Ref. no.	Title	Indigenous Nation/Community	Project Team	Type of communication	No. of participants
31-01-23 13:51	C-22889	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) Riel Warrilow - Saugeen Ojibway Nation (SON)	Jed Johns	Email	4
23-02-23 07:48	C-23392	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario Linda Norheim - Metis Nation of Ontario	Jed Johns	Email	3
23-02-23 08:28	C-23393	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario Linda Norheim - Metis Nation of Ontario	Jed Johns	Email	3
07-03-23 08:42	C-23756	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns Thomas Stachowski	Email	4
13-03-23 10:12	C-24081	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns	Email	3
16-03-23 11:38	C-24209	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario Linda Norheim - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Email	4
27-03-23 08:50	C-24652	RE: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager)	Jed Johns	Email	2
30-03-23 08:14	C-27855	EPCOR - Brockton Natural Gas Expansion Project	Emily Martin - Saugeen Ojibway Nation (SON) (Infrastructure & Resources Manager) William Fitzgerald Robert Martin - Saugeen Ojibway Nation (SON)	Jed Johns	Email	4
31-03-23 14:29	C-27854	Re: EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - (SON) Riel Warrilow - (SON) Jarmo Jalava William Blackport	Jed Johns	Email	6
05-05-23 15:01	C-27853	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario Mary Macdougall - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Email	4



Date & Time	Ref. no.	Title	Indigenous Nation/Community	Project Team	Type of communication	No. of participants
07-06-23 16:39	C-27830	EPCOR Natural Gas Limited Partnership – Brockton Natural Gas Expansion Project – Environmental Report	Emily Martin - (SON) Riel Warrilow - (SON) Jarmo Jalava William Blackport	Jed Johns	Email	6
08-06-23 15:19	C-27858	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario Mary Macdougall - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Email	4
30-06-23 8:55		RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Ethan Roy - Metis Nation of Ontario Mary MacDougall - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Email	4
05-07-23 16:10	C-28438	RE: Follow-up with MNO from June 29 Meeting with EPCOR re Brockton NG Project	Mary Macdougall - Metis Nation of Ontario	Jed Johns Thomas Stachowski	Email	4
15-09-23	C-30846	RE: EPCOR Indigenous Relations Team Update	Jarmo Jalava - Saugeen Ojibway Nation (SON)	Thomas Stachowski Lorne Fidgette	Email	3
27-09-23	C-30851	RE: SON EO Brockton Natural Gas Expansion	Karen Heisler - Saugeen Ojibway Nation (SON)	Thomas Stachowski Lorne Fidgette	Meeting	3
03-10-23	C-30848	RE: SON EO Brockton Natural Gas Expansion	Karen Heisler - Saugeen Ojibway Nation (SON)	Lorne Fidgette Thomas Stachowski	Email	3
06-10-23	C-30866	RE: SON EO Brockton Natural Gas Expansion	Karen Heisler - Saugeen Ojibway Nation (SON) Dr. Robert Martin - Saugeen Ojibway Nation (SON) Natalie Kuipers - Saugeen Ojibway Nation (SON)	<u>EPCOR</u> Thomas Stachowski Dave Ashbourne Shubham Mohan Mark Emmanuel Lorne Fidgette  <u>Stantec</u> Patrick Hoskins Mike Candido	Meeting	10

## 5-Staff-16

**Ref.:** Exhibit G, Tab 1, Schedule 1, Page 1

### Preamble

EPCOR stated that the Preferred Route for the Brockton Project follows the public road allowance for the entirety of the project and no permanent easements are required. If field conditions require the need for permanent easements, EPCOR will obtain these from property owners as required. As of the timing of filing the current application, EPCOR had not identified any directly impacted landowners and no permanent easements were required.

EPCOR stated that temporary working areas may be required along the Preferred Route where the road allowance is too narrow or when a road crossing requires extra space to facilitate construction. These areas will be identified with the assistance of the contractor that will be performing the work. Agreements for this temporary working areas will be negotiated and obtained where required.

EPCOR filed its standard form Pipeline Easement Agreement and its standard form Temporary Work Space Agreement. EPCOR states these forms of agreement were previously approved by the OEB for use in EPCOR's Southern Bruce Project.<sup>17</sup>

OEB staff compared the forms of land use agreement approved by the OEB for EPCOR's Southern Bruce Project with those filed for approval in the current proceeding. Despite EPCOR's claim that the agreements filed in the current proceeding are those that the OEB approved for use with the Southern Bruce project, the two sets of agreements are not identical. Most of the differences do not appear to be material (e.g., the sequence of certain sentences has been reordered). However, the current form of Pipeline Easement Agreement now contains wording that limits EPCOR's liability to "acting reasonably" in certain circumstances.

### Questions

- a) Has the need for any permanent easements been identified since the application was filed? If so, please provide an update on permanent easement negotiations.

**EPCOR Response:** No requirements for permanent easement have been identified to

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<sup>17</sup> EB-2018-0263

date.

- b) Please explain why EPCOR did not identify and explain the changes it made to its form of Pipeline Easement Agreement.

**EPCOR Response:** Through an inadvertent administrative error EPCOR did not identify and explain the changes made to its form of Pipeline Easement Agreement.

- c) For each instance where EPCOR added “acting reasonably” to its form of Pipeline Easement Agreement, please explain why the addition is reasonable.

**EPCOR Response:** The addition of “acting reasonably” to clauses 3.1, 3.3 and 5.2 are reasonable because they provide additional assurances to the Owner. Each provision is addressed below:

**3.1** EPCOR, acting reasonably shall have the right at any time and from time to time to do whatever may be required, for the enjoyment of the rights granted under this Agreement, including the removal of any boulder or rock or the trimming and removal of all trees, shrubs and other vegetation on, over, across, along, in, under and through the Right-of-Way as described in Schedule A.

Although EPCOR has rights to access and enjoy the Right-of-way, by imposing an acting reasonably standard, EPCOR must exercise some discretion. The reasonableness standard means that ENGLP will make efforts to take the least intrusive method possible (i.e. removing only the necessary vegetation). The reference may be removed to provide ENGLP with greater discretion, but the addition of it actually provides greater protection to the land owner.

**3.3** EPCOR and its Authorized Representatives shall have the right of ingress and egress from the Right-of-Way at any and all times on, over across, along, in, under and through the Lands for the purposes of

exercising the rights granted under this Agreement. This right of access shall be used only in cases of necessity or emergency, as determined by EPCOR in EPCOR's sole and absolute discretion, **acting reasonably**. EPCOR shall pay reasonable compensation to the Owner of the Lands for any damage caused by EPCOR and its Authorized Representatives in the exercise of the right of access as granted to EPCOR under this Clause 3.3.

Notwithstanding that EPCOR has discretionary rights to access the Right-of-Way, the "acting reasonably" clause requires EPCOR to consider the context when determining whether there is an emergent situation requiring access. The addition of "acting reasonably" here provides greater protection to the landowner since it requires ENGLP to consider whether access is emergent and necessary before it accesses the Right of Way.

**5.2** The Owner shall not, without the prior written consent of EPCOR, **acting reasonably**, stockpile, excavate, drill, install, erect, construct or place above, through, on or under the Right-of-Way any pavement, building, fence, pit, well, pipe, foundation, sidewalk, or other structure or improvement, or do or permit to be done any mining, quarrying, land levelling or other work or activity of any like or similar nature on, in or under the Right-of-Way. The Owner shall not permit any of these activities to occur by others.

By imposing a reasonableness standard, the Owner is prevented from interfering with the Right-of-Way for any purposes and prior to seeking EPCOR's consent, must consider whether the proposed interference has a valid and reasonable purpose. For example, this clause will limit the landowner from seeking EPCOR's consent to excavate where there is no valid basis to do so. The acting reasonably standard encourages the landowner to consider alternatives prior to seeking EPCOR's consent.

**EPCOR Natural Gas Limited Partnership**

**Response to Supplemental OEB Staff  
Interrogatories**

**Brockton Community Expansion Project**

**EB-2022-0246**

**October 12, 2023**

### 3-Staff-17

**Ref.: Exhibit K, Tab 1, Schedule 1, Page 1**

#### **Preamble**

On January 1, 2021, phase one of Ontario's *On-Site and Excess Soil Management Regulation*, O. Reg. 406/19, and supporting amendments took effect (Regulation). The Regulation introduced a framework for the excavation, removal, transport and disposal of excess soils between two or more sites. On January 1, 2022, the phase two provisions of the Regulation came into effect and were in place briefly from January to April 2022, following which they were temporarily suspended until January 1, 2023. This temporary suspension of the Regulation was intended to provide time for municipalities, developers, and other stakeholders to gain a greater understanding of its requirements and for the Ministry of the Environment, Conservation and Parks to consider the need for improvements.

EPCOR was recently informed by its Project contractor that construction costs for the Project would increase as a result of soil handling requirements set out in the Regulation, including but not limited to soil testing, removal, tracking and disposal of excess soils. On September 5, 2023, the Project contractor provided EPCOR with a quote for projected increased costs directly related to the Regulation.

#### **Questions**

- a) Please briefly explain the similarities and differences between the phase one and phase two provisions.

#### **EPCOR Response:**

The first phase provisions in the *On-Site and Excess Soil Management Regulation*, O. Reg. 406/19 (the "**Regulation**") were in effect from January 1, 2021 and implemented provisions related to waste designation and reuse or disposal of materials.

The second phase provisions were in effect from January 1, 2022 to April 2022 and relate to documentation and tracking requirements. These provisions were then temporarily suspended until January 1, 2023, causing sections 8-16 of the Regulation to come into effect on January 1, 2023 rather than January 1, 2022. However, the pause did not affect the other provisions of the Regulation that were already in effect since January 1, 2021,

including the criteria in ss.3-6, s. 17, s. 23, and the related excess soil reuse standards and rules.

Accordingly, this pause applied to only the following provisions related to excess soil:

- Soil registry and filing a notice in the registry;
- Completion of an assessment of past uses;
- Completion of an excess soil destination assessment report; and,
- Implementation of a tracking system related to the movement of excess soil.

Overall, Phase Two introduced new filing, documentation and tracking requirements for those responsible for leading projects that involve the removal of soil from a site and owners and operators of reuse sites at which excess soil will be deposited. Project Leaders will also be responsible for implementing new excess soil tracking systems and ensuring a qualified person prepares certain assessments and reports with respect to the quality of the excess soil as well as the applicable environmental standards for the project and deposit sites. Project owners will also be required to file a notice in the Excess Soil Registry, before beginning the removal of excess soil from their project area. Additionally, Phase Two introduces amendments to the current record keeping rules for transporters of soil.

- b) Please confirm that any costs associated with the phase one provisions have already been accounted for in the cost of the project. Otherwise, please explain.

**EPCOR Response:** On August 4, 2020, EPCOR applied for funding assistance under Phase 2 of the Government of Ontario's Natural Gas Expansion Program (NGEP) for the Brockton project. Thereafter, the phase one provisions of the of the *On-Site and Excess Soil Management Regulation*, O. Reg. 406/19 (the "**Regulation**") were implemented on January 1, 2021, months after funding for project costs had been requested. The implementation of phase two provisions of the Regulation on January 2, 2023, resulted in additional requirements which must be factored into the cost of excess soil removal from the Brockton project site. Those costs associated with the Regulation that would be

recorded in the Excess Soil Variance Account pertain to both (a) soil testing, documentation and tracking and (b) transporting excess soil waste to a local waste transfer facility. We understand these categories of soil removal costs to be a combination of phase one and phase 2 provisions of the Regulation. Finally, EPCOR only recently became aware of the materiality and quantum of budgeted costs related to excess soil disposal on September 5, 2023, when the Project contractor provided EPCOR with a quote for projected increased costs directly related to the Regulation.



### 3-Staff-18

**Ref.: Exhibit A, Tab 2, Schedule 1, Page 5  
Exhibit K, Tab 1, Schedule 1, Pages 1 and 3**

#### **Preamble**

In early 2023 EPCOR updated the economics of the Project and determined that as a result of industry wide construction and maintenance cost increases in addition to a reduced customer consumption forecast, the project would no longer achieve a Profitability Index (PI) of 1.0. As an alternative to cancelling the project, EPCOR modified the Project scope such that it achieves a PI of 1.0.

EPCOR is forecasting that during the system expansion construction phase of the Project, it will incur additional charges of approximately \$500,000 to manage excess soil in compliance with the Regulation and related requirements.

EPCOR is seeking an end date for recording amounts in the Excess Soil Variance Account (ESVA) of January 1, 2033 (the end of the 10-year rate stability period) in order to capture any ongoing costs associated with compliance with the Regulation.

EPCOR says that without approval of this variance account, the PI for the project is forecast to be 0.90.

#### **Questions**

- a) Please confirm that, inclusive of the soil management costs, the total project cost is now \$24.95 million (and the cost was previously \$24.48 million).

**EPCOR Response:** Confirmed.

- b) Please provide the revised net project cost after the application of the NGEP funding.

**EPCOR Response:** Confirmed.

Initial cost	\$24.95 Million
Less: NGEP Funding	\$20.34 Million
<b>Revised Net Project Cost</b>	<b>\$4.61 Million</b>

- c) Please provide an updated net present value calculation (Exhibit E, Tab 1, Schedule 1, Attachments 1 and 2) based on the updated total project cost assuming the ESVA is not approved.

**EPCOR Response:** Please refer to Attachment 3-Staff-18 included in this document.

Please provide EPCOR's position on which NPV calculation that the project should be evaluated based on: (a) original NPV calculation; or (b) updated NPV calculation requested in part (c) of this question above. Please provide rationale supporting EPCOR's position.

**EPCOR Response:** The project should be evaluated on based on the NPV calculation requested in part (c) above. The NPV calculation in part (c) includes the updated costs of the project i.e. it includes the costs associated with compliance with the excess soil legislation as detailed in 3-Staff-17 above.

- d) Please confirm that the proposed ESVA, if approved, would only be applicable to Brockton customers. Otherwise, please explain.

**EPCOR Response:** Confirmed.

- e) Please provide the proposed timing of the disposition of any balance in the ESVA (e.g., annually, or at the end of the RSP term).

**EPCOR Response:** The proposed timing of disposition of any balance of the revenue requirement necessary to fund the accumulated capital costs associated with compliance with the Legislation in the ESVA would be brought forward for disposition during the annual IRM application.

At the end of the 10-year rate stability period EPCOR is proposing that the existing balance of the accumulated and depreciated costs associated with compliance with the Legislation would be brought forward to be included in the utility's rate base in the rate case that will cover the period subsequent to the rate stability period.

- f) Please confirm that the rates that EPCOR intends to charge its Brockton customers are no longer sufficient to cover the costs of the Project.

**EPCOR Response:** Confirmed.

- g) As an alternative to the ESVA, did EPCOR consider further modifying the scope of the Project to maintain a PI of 1.0? Please explain the advantages and disadvantages of this alternative approach, and why EPCOR decided not to pursue this option.

**EPCOR Response:** EPCOR undertook a preliminary analysis regarding the potential to further modify the scope of the Project in order to maintain a PI of 1.0. However, given the impacts of further scope modification as detailed in (h) below, EPCOR elected to request the establishment of the ESVA.

The major advantage of further modifying the Project versus establishing the ESVA is that this application would be slightly simplified as EPCOR would not be requesting establish the account. However, the reduced number of customers included in the modified Project would continue to support the capital costs associated with compliance with the *On-Site and Excess Soil Management Regulation*, O. Reg. 406/19 as those costs would then be directly included in the overall Project capital costs.

The disadvantages of further modifying the Project are that a smaller geographical area would be covered by the Project resulting in fewer customers having the option of connecting to the facility expansion and accessing the advantages of natural gas as an energy source. The final project would also be shifting further away from the original Project scope. In addition, with a smaller customer base, the NGEP grant per customer would increase, reducing its effectiveness.

- h) What length of pipeline would need to be removed from scope and how many customer connections would be forgone if EPCOR were to rescope the Project to achieve a PI of one rather than implement the ESVA?

**EPCOR Response:** EPCOR would need to further reduce the distribution pipe by 8.7km to reach a PI of 1.0. Potential connections would drop an additional 35 from 638 to 603 with the forecast connections reducing 23 from 423 to 400.

- i) Why can EPCOR not accommodate the additional cost to comply with the Regulation through the use of Project contingency? In the response, please explain why or why not.

**EPCOR Response:** The initial Project contingency was \$3,769,975 or 15.4% of the initial capital cost of \$24,475,889. If the entire estimated cost of \$500,000 was taken from Project contingency it would have been reduced to \$3,300,705 or 13.5%, with the Project as the same stage as it was before the dollars were removed from contingency. EPCOR is of the view that this is insufficient contingency for this Project given the added uncertainty regarding the final costs associated with compliance with the Regulation.

## EBO 188

Year	Row Sum	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
PV Factor (mid-year discounting)		0.97	0.92	0.87	0.82	0.78	0.74	0.70	0.66	0.63	0.59	0.56	0.53	0.50	0.48	0.45	0.43	0.40	0.38	0.36
WACC	5.66%																			
Base Year for EBO 188	2024																			

### 1. PV of Operating Cash Flow

#### 1a) PV of Net Operating Cash

Revenue	\$ '000s		233	548	610	634	658	654	663	672	675	676	676	676	676	676	676	676	676	676	
O&M and Overheads	\$ '000s		(145)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	
Net Working Capital	\$ '000s		(26)	(23)	(1)	(0)	(0)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Variance Account for Excess Soil	\$ '000s		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Operating Cash	\$ '000s		62	234	318	343	367	363	372	381	384	385	385	385	385	385	385	385	385	385	
PV of Net Operating Cash	\$ '000s	5,630	60	215	277	283	286	268	260	252	240	228	216	204	194	183	173	164	155	147	139

#### 1b) PV of Taxes

Municipal Taxes	\$ '000s		0	(32)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(102)	(102)	(102)	(102)	(102)	(102)	(102)
Income Taxes (before CCA and Interest Tax Shields)	\$ '000s		(23)	(59)	(68)	(74)	(80)	(79)	(82)	(84)	(85)	(85)	(85)	(75)	(75)	(75)	(75)	(75)	(75)	(75)
Total Taxes	\$ '000s		(23)	(92)	(132)	(138)	(145)	(144)	(146)	(148)	(149)	(149)	(149)	(177)	(177)	(177)	(177)	(177)	(177)	(177)
PV of Taxes	\$ '000s	(2,422)	(23)	(84)	(115)	(114)	(113)	(106)	(102)	(98)	(93)	(89)	(84)	(94)	(89)	(84)	(80)	(76)	(71)	(68)
																				(64)

### 2. PV of Capital

Capital Expenditures	\$ '000s		(24,127)	(271)	(83)	(80)	(80)	(40)	(29)	(14)	(4)	0	0	0	0	0	0	0	0	0
Customer Contributions	\$ '000s		20,340	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Capital Expenditure	\$ '000s		(3,787)	(271)	(83)	(80)	(80)	(40)	(29)	(14)	(4)	0	0	0	0	0	0	0	0	0
PV of Capital	\$ '000s	(4,195)	(3,684)	(249)	(73)	(66)	(62)	(29)	(20)	(10)	(2)	0	0	0	0	0	0	0	0	0

### 3. PV of CCA Tax Shield

CCA	\$ '000s		273	227	219	212	205	195	186	177	168	158	149	140	132	125	118	111	105	99	93
Tax Rate	%		26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
Tax Rate x CCA	\$ '000s		72	60	58	56	54	52	49	47	44	42	39	37	35	33	31	29	28	26	25
PV of CCA Tax Shield	\$ '000s	620	70	55	51	46	42	38	34	31	28	25	22	20	18	16	14	13	11	10	9

### 4. NPV and PI Calculations

PV of Net Operating Cash	\$ '000s	5,630	60	215	277	283	286	268	260	252	240	228	216	204	194	183	173	164	155	147	139
PV of Taxes	\$ '000s	(2,422)	(23)	(84)	(115)	(114)	(113)	(106)	(102)	(98)	(93)	(89)	(84)	(94)	(89)	(84)	(80)	(76)	(71)	(68)	(64)
PV of CCA Tax Shield	\$ '000s	620	70	55	51	46	42	38	34	31	28	25	22	20	18	16	14	13	11	10	9
PV of Capital	\$ '000s	(4,195)	(3,684)	(249)	(73)	(66)	(62)	(29)	(20)	(10)	(2)	0	0	0	0	0	0	0	0	0	0
Sum	\$ '000s	367	(3,576)	(63)	140	149	154	171	172	175	173	165	154	130	122	115	108	101	95	89	84
NPV	\$ '000s		(3,576)	(3,639)	(3,499)	(3,350)	(3,196)	(3,025)	(2,853)	(2,678)	(2,505)	(2,340)	(2,186)	(2,056)	(1,934)	(1,819)	(1,712)	(1,611)	(1,516)	(1,426)	(1,343)
Cumulative PV of Net Operating Cash, Taxes and CCA	\$ '000s	Year 40 PI	108	294	506	721	937	1,138	1,330	1,515	1,690	1,855	2,009	2,139	2,261	2,376	2,483	2,585	2,679	2,769	2,853
Cumulative PV of Capital	\$ '000s		(3,684)	(3,933)	(4,006)	(4,072)	(4,134)	(4,163)	(4,183)	(4,193)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)
PI	\$ '000s	0.91	0.03	0.07	0.13	0.18	0.23	0.27	0.32	0.36	0.40	0.44	0.48	0.51	0.54	0.57	0.59	0.62	0.64	0.66	0.68

Year	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063
PV Factor (mid-year discounting)	0.34	0.32	0.31	0.29	0.27	0.26	0.25	0.23	0.22	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.13	0.12	0.11
WACC	5.66%																				
Base Year for EBO 188	2024																				

## 1. PV of Operating Cash Flow

### 1a) PV of Net Operating Cash

Revenue	\$ '000s	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	676	
O&M and Overheads	\$ '000s	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	(291)	
Net Working Capital	\$ '000s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Variance Accounting for Excess Soil	\$ '000s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net Operating Cash	\$ '000s	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385	385	
PV of Net Operating Cash	\$ '000s	132	125	118	112	106	100	95	90	85	80	76	72	68	64	61	58	55	52	49	46	44

### 1b) PV of Taxes

Municipal Taxes	\$ '000s	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)	(102)		
Income Taxes (before CCA and Interest Tax Shields)	\$ '000s	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)	(75)		
Total Taxes	\$ '000s	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)	(177)		
PV of Taxes	\$ '000s	(61)	(57)	(54)	(51)	(49)	(46)	(44)	(41)	(39)	(37)	(35)	(33)	(31)	(30)	(28)	(27)	(25)	(24)	(22)	(21)	(20)

## 2. PV of Capital

Capital Expenditures	\$ '000s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Customer Contributions	\$ '000s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Capital Expenditure	\$ '000s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV of Capital	\$ '000s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## 3. PV of CCA Tax Shield

CCA	\$ '000s	88	83	78	74	69	65	62	58	55	52	49	46	43	41	39	36	34	32	31	29	27
Tax Rate	%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
Tax Rate x CCA	\$ '000s	23	22	21	19	18	17	16	15	15	14	13	12	11	11	10	10	9	9	8	8	7
PV of CCA Tax Shield	\$ '000s	8	7	6	6	5	4	4	3	3	3	2	2	2	2	1	1	1	1	1	1	1

## 4. NPV and PI Calculations

PV of Net Operating Cash	\$ '000s	132	125	118	112	106	100	95	90	85	80	76	72	68	64	61	58	55	52	49	46	44
PV of Taxes	\$ '000s	(61)	(57)	(54)	(51)	(49)	(46)	(44)	(41)	(39)	(37)	(35)	(33)	(31)	(30)	(28)	(27)	(25)	(24)	(22)	(21)	(20)
PV of CCA Tax Shield	\$ '000s	8	7	6	6	5	4	4	3	3	3	2	2	2	2	1	1	1	1	1	1	1
PV of Capital	\$ '000s	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	\$ '000s	79	74	70	66	62	58	55	52	49	46	43	41	39	37	34	33	31	29	27	26	24
NPV	\$ '000s	(1,264)	(1,189)	(1,119)	(1,054)	(992)	(933)	(878)	(826)	(777)	(731)	(688)	(647)	(608)	(571)	(537)	(504)	(474)	(445)	(417)	(392)	(367)
Cumulative PV of Net Operating Cash, Taxes and CCA	\$ '000s	2,932	3,006	3,076	3,142	3,204	3,262	3,317	3,369	3,418	3,464	3,508	3,549	3,587	3,624	3,658	3,691	3,722	3,751	3,778	3,804	3,828
Cumulative PV of Capital	\$ '000s	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)	(4,195)
PI	\$ '000s	0.70	0.72	0.73	0.75	0.76	0.78	0.79	0.80	0.81	0.83	0.84	0.85	0.86	0.86	0.87	0.88	0.89	0.89	0.90	0.91	0.91

## Assumptions and Results

In Service Year	2024	
Discount Rate (After-tax WACC)	5.66%	
<b>Operating Cash Flow</b>		
Incremental Distribution Revenues	Southern Bruce Rates*	
Expenses:		
Operating and Maintenance Expenses	Estimated Incremental costs	
Operating and Maintenance Expenses	Estimated Incremental costs	
Income Tax Rate	26.50%	
<b>Capital Expenditures</b>		
Gross Capital Costs	24,727	
Funding	(20,340)	
Net Capital Costs	4,387	
<b>CCAP Tax Shield</b>		
	<b>CCA Class</b>	<b>CCA Rate</b>
Distribution Mains	Class 51	6.00%
Customer Service Lines and Meters	Class 51	6.00%
Distribution Land Rights	CCA Class 14.1	5.00%
Declining balance basis with accerlerated CCA (Bill C-97)		
<b>Feasibility Results</b>		
	<b>NPV</b>	<b>PI</b>
Economic Feasibility without Funding	(17,274)	0.28
Economic Feasibility with Funding	(367)	0.91

\* Southern Bruce rates effective July 1, 2023 and adjusted for estimated escalation rate of 2.03%

2.03% is derived by the prescribed formula  $(1-0.314)*0.0127+0.314*3.70\%$

3.70% is the OEB approved inflation rate for 2023

### 3-Staff-19

**Ref.: Exhibit K, Tab 1, Schedule 1, Attachment 1, Page 1**

#### **Preamble**

The additional costs of complying with the Regulation include the cost of environmental compliance testing, transporting excess soil from the worksite to an approved slurry handling facility, the fees charged by such a facility, and any other related costs necessary to meet all requirements under the Regulation.

#### **Questions**

- a) The evidence uses the terms “excess soil” and “slurry handling facility”.
- i. Please confirm that the term excess soil refers to soil (including any associated stones, debris, etc.) associated with excavation activities (e.g., removed by shovel, backhoe, excavator, etc.). Otherwise, please explain.

**EPCOR Response:** Excess soil means soil, crushed rock or soil mixed with rock or crushed rock that has been excavated as part of a project and removed from the project area for the project.

- ii. Please confirm that the term slurry refers to excess drilling fluid (e.g., bentonite clay, water and any additives) associated with horizontal directional drilling (HDD) activities. Otherwise, please explain.

**EPCOR Response:** Confirmed. “Slurry” refers to excess drilling fluid, as well as soils removed due to hydrovac activities.

- b) Are the additional costs driven more by excess soil associated with excavations or by slurry associated with HDD activities? Please quantify (if possible) and explain.

**EPCOR Response:** We are unable to provide a cost split between Hydrovac excavation and HDD activities. The pricing as provided by the contractor is an estimate only and does not have a full breakdown. The actual cost for HDD activity and Hydrovac excavation will be dependent on the onsite condition encountered during construction.



- c) What actions (e.g., protocols and procedures) will EPCOR take to minimize the amount of excess soil and slurry generated during construction? Please provide a brief explanation of each action and how it will be monitored and enforced.

**EPCOR Response:** EPCOR plans to minimize the amount of slurry generated during construction by implementing two strategies. First, the pipeline route will be designed on the side of roadways which have the least amount of existing utilities. Additionally, where possible, we design the alignment to have a minimum distance of greater than one meter from existing utilities. These two design approaches combined will reduce the requirement of daylighting the existing utilities and reduce the Hydrovac slurry generated on the project. Second, while working with the contractor we will review their drilling procedure to limit the amount of fluid required for HDD activities. This will in turn minimize the amount of HDD slurry required for disposal.

For monitoring EPCOR plans on collecting daily dockets/receipts of slurry disposal, which will be then verified against the construction recess completed that day. Only once validated the payment for the slurry disposal be approved for payment to the contractor.

**EPCOR Natural Gas Limited Partnership**

**Response to Enbridge Gas Inc. Interrogatories**

**Brockton Community Expansion Project**

**EB-2022-0246**

**October 12, 2023**

**1. Reference: EPCOR Application, Exhibit B, Tab 1, Schedule 1, Pages 2-3 & Table 1**

*“In January 2020, The Municipality of Brockton retained Innovative Research Group, an independent third party market research group to conduct the “Brockton Natural Gas Line Load Forecasting Survey” (the “Survey”), a market survey to gauge the interest of residents and business in natural gas distribution service and conversions. The Survey was completed with the support of EPCOR, and was used in the development of the Project application for Phase 2 NGEF. The results of the Survey are summarized in Attachment 1 of this Exhibit.” [...]*

*“9. Results from the Survey indicate that in the survey area the split between fuel sources for residents is currently 41% propane forced air, 18% wood stove/fireplace, and 12% oil forced air. 89% of respondents indicated that they would be likely (definitely or somewhat likely) to convert to natural gas if it were made available. Cost savings were the primary reasons cited by respondents who reported that they would likely convert to natural gas if it were made available.*

*10. EPCOR also conducted its own in-person interviews with large agricultural customers, including those that currently have grain drying facilities or requirements to heat production barns. Of the total of four such customers contacted before EPCOR submitted its NGEF application, all indicated an interest in converting to natural gas once it became available. These customers generally use propane as their major heat source at this time. Letters of support from these customers are included in Attachment 2 of this Exhibit.”*

**Questions:**

- (a) What are the estimated payback periods for the costs of converting from the Alternative Energy Sources listed in Table 1 to natural gas?

**EPCOR Response:**

Energy Source	Usage (m3)	Annual Bill	Annual Savings from Switching to NG	Conversion Cost to Natural Gas	Estimated Payback Period (Years)
Natural Gas	1,464	\$1,314	N/A	N/A	N/A
Propane	2,242	\$2,213	\$899	\$1,200	1.3
Fuel Oil	1,635	\$2,351	\$1,037	\$6,500	6.3
Electricity (BB) (kWh)	15,931	\$2,109	\$795	\$12,500	15.7
Electricity (Forced Air) (kWh)	15,931	\$2,109	\$795	\$6,000	7.5

Conversion cost estimates presented were previously provided in the EB-2019-0255 EPCOR Municipality of Brockton Expansion Project, Filed: 2020-08-04, EB-2019-0255, Exhibit 1, Schedule 3, Page 1 of 2

- i. How many contractors are available in the project area to undertake the proposed conversions?

**EPCOR Response:** EPCOR has compiled a list of preferred HVAC providers active in the area, which can be found here:

<https://www.epcor.com/products-services/natural-gas/Pages/hvac-listing-page.aspx>

- (b) The letters of support from the Ontario Federation of Agriculture and its constituents included in Attachment 2 date back over 3 years. Have there been any updates on the support of these potential customers?

**EPCOR Response:** There have been no additional updates.

**2. Reference: EPCOR Application, Exhibit B, Tab 1, Schedule 1, Page 5 & Exhibit E, Tab 1,**

Schedule 1, Page 4

*“18. The Project has been selected by the Government of Ontario to support the NGEP and is designed to expand access of safe, reliable, and affordable natural gas to unserved areas of Ontario. The need for the Project is supported by EPCOR’s market research which demonstrates the affordability of natural gas relative to alternative energy sources for customers in Municipality of Brockton, Municipality of West Grey, Municipality of Kincardine, and Township of Arran- Elderslie.”*

*“13. Based on the forecast of the Project’s costs and revenues, before program funding the Profitability Index (“PI”) is 0.28. With program funding the PI is 1.0 with a NPV of \$0.”*

**Question:**

Please confirm that EPCOR would not pursue the proposed project without the NGEP contribution.

**EPCOR Response:** Confirmed.

**3. Reference: EPCOR Application, Exhibit B, Tab 1, Schedule 1, Attach 2, Page 7.**

*“Over the past 25 years we have talked to Union Gas/Enbridge people on a couple of occasions. Union Gas had an expansion/sales office just north of Mildmay in the old township office over 20 years ago where I talked to 2 representatives. They told me they were evaluating South Bruce for the potential of expansion for that area but there were no plans for my area. Several years ago we contacted Enbridge again and asked about getting gas to our farm in the north end of Brockton and they assured me we would never get natural gas.”*

**Question:**

Please provide documentation supporting the claims made by Berry Bush Farms as submitted by EPCOR in the application.

**EPCOR Response:** EPCOR is not in possession of this documentation.

**EPCOR Natural Gas Limited Partnership**

**Response to Environmental Defence  
Interrogatories**

**Brockton Community Expansion Project**

**EB-2022-0246**

**October 12, 2023**

## **EB-2022-0246 Brockton Gas Expansion Project**

### **Interrogatories of Environmental Defence**

#### **Preamble:**

EPCOR notes that many of the questions submitted from Environmental Defence (ED) seek information that is out of scope, and not relevant for this Leave-to-Construct proceeding which is a product of the Ontario Government's Natural Gas Expansion Program ("NGEP").

The NGEP was created under the *Access to Natural Gas Act, 2018*, which is incorporated into section 36.2 of the *Ontario Energy Board Act*. The express aim of the NGEP is to fund projects to connect unserved communities to natural gas service that would otherwise be uneconomic. EPCOR's Brockton Project was selected by the Ministry of Energy for eligibility to receive funding as part of Phase 2 of the NGEP and has been designated as a qualifying investment under O. Reg. 24/19.

Many of the questions submitted by ED (and what often appear to be duplicate copies of questions also sent to Enbridge Gas Inc., sometimes without updates to names or geographic regions) inappropriately seek to have EPCOR respond to questions based on highly speculative or unlikely scenarios or agree/admit to over-simplified claims that relate to the environmental and associated financial impacts of proceeding with natural gas expansion in the Brockton Project communities as opposed to alternatives like cold climate heat pumps.

A leave to construct ("LTC") proceeding is not the appropriate venue to seek to either circumvent or debate the efficacy of the NGEP. In particular, this application does not involve the OEB making a choice between the approval, or recommending the use, of cold climate heat pumps instead of an expansion of natural gas facilities in serving unserved communities. The OEB has previously accepted that the *Access to Natural*



*Gas Act, 2018* and its proposed program implementation represents an important consideration in the determination of the public interest in providing the availability of natural gas service in unserved communities. Furthermore, alternatives to natural gas were not considered as part of the guidelines developed to choose qualified investments and the OEB's Integrated Resource Planning Decision exempted NGEP projects from the requirement of an in-depth assessment of alternatives to natural gas expansion.

EPCOR does not intend to debate the prioritization of various policy matters with ED as it is not the decision maker on these policies. Should the Government of Ontario, or the OEB wish to provide guidance on these matters, EPCOR would react accordingly. However, EPCOR acknowledges that LTC applications require an examination of the economics of an expansion project, including projections of costs, customer take up and the subsequent rate revenue upon project completion. In that regard, EPCOR has completed consultation with various stakeholders, interest groups and potential customers in preparation of this application, all of which have provided support for this expansion.

## Interrogatory # 1.0-ED-1

Reference: Exhibit A, Tab 2, Schedule 1, Page 2

Question(s):

- (a) Please prepare a side-by-side comparison table showing each aspect of the project (i) at the time that it received approval by the Government of Ontario for NGEF funding and (ii) as proposed today. For instance, please include the capital costs, the NGEF subsidy, the customer attachments, the NGEF subsidy per forecast customer attachment, the forecast revenue, the kms of pipe to be built, etc.

### EPCOR Response:

	NGEF Application	LTC Application 2023
Project Capex (\$M)	28.4	24.9
NGEF Subsidy (\$M)	20.34	20.34
Customer Attachments (Forecast Cx)	501	423
NGEF Subsidy per Forecast Customer Attachment (\$)	40,599	48,085
Forecast Revenue (\$M)	31,779	26,970
System Length (km)	107	80.6

- (b) Please provide all correspondence between EPCOR and the Government of Ontario regarding this project.

**EPCOR Response:** As related to the duty to consult, this is gathered and summarized in the communication log. Additional communication will be submitted in attachment ENGLP\_IRR\_1-ED-1.

- (c) Has the Government of Ontario provided approval for EPCOR to continue to receive the full NGEF subsidy despite the changed project parameters, including the reduced customer attachments and reduced number of customers that will have an opportunity to connect to gas?

**EPCOR Response:** EPCOR has provided the Government of Ontario with updates on the revised project scope. The Government has indicated that funding will be provided upon confirmation of the necessary OEB approvals referred to in section 2(1)(b) of the

Expansion Funding Regulation have been obtained in relation to a gas expansion project covered by that Regulation.

## Interrogatory # 1.0-ED-2

Reference: Exhibit B, Tab 1, Schedule 1, Attachment 3

Question(s):

- (a) Please provide all communications to and from the Municipality of Brockton regarding the project, including all communications to the Municipality of Brockton describing the benefits (e.g. letters, presentations, etc.).

**EPCOR Response:** To be submitted as attachment ENGLP\_IRR\_1-ED-2.

- (b) Please provide a list of all meetings with staff and elected officials from the Municipality of Brockton and the meeting notes and materials for each.

**EPCOR Response:**

Meeting Date	Participants	Method	Topic
21-Oct-19	<u>Brockton</u> Sonya Watson <u>EPCOR</u> Kevin Sonnenberg Thomas Stachowski	Teleconference Call	Brockton Survey
5-Feb-20	<u>Brockton</u> Sonya Watson <u>Innovative Research Group</u> Susan Oakes <u>EPCOR</u> Thomas Stachowski	Teleconference Call	Brockton Survey Review
12-May-22	<u>EPCOR</u> Thomas Stachowski <u>Brockton</u> Sonya Watson	In-Person	Project Status Update
7-Mar-23	<u>EPCOR</u> Thomas Stachowski	Virtual	Council Meeting - Project Status Update

26-May-23	<u>Brockton</u> Nicholas Schnurr Sonya Watson <u>EPCOR</u> Bruce Brandell Susannah Robinson Thomas Stachowski	Virtual	Brockton Expansion Update - Project Staging
9-Jun-23	<u>EPCOR</u> Karim Kassam Thomas Stachowski	Teleconference Call	Brockton Council - Project Information Session
20-Jun-23	<u>EPCOR</u> Susannah Robinson Thomas Stachowski	In-Person	Council Meeting - Project Status and Staging Update

### Interrogatory # 1.0-ED-3

Reference: Exhibit B, Tab 1, Schedule 1, Attachment 3

Question(s):

- (a) Please complete the following table to confirm which of the following facts EPCOR communicated to the Municipality of Brockton (and for any that were communicated, please provide the communication including a pinpoint reference to where that fact is contained):

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

Information Communicated to the Municipality of Brockton		
Information	Whether communicated to the city (Y/N)	If no, why not; if yes, where & when
(i) That the federal government is offering \$5,000 rebates for customers to switch to high-efficiency electric heat pumps, which are not available for gas furnaces. <sup>1</sup>	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.
(ii) That the federal government is offering an <i>additional</i> \$5,000 in rebates for customers to switch from oil to high-efficiency electric heat pumps if they earn a median income or lower (e.g. \$122,000 after-tax income for a family of 4 in Ontario) through the Oil to Heat Pump Affordability Program. <sup>2</sup>	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.
(iii) That the federal government is now providing up to \$40,000 in interest free loans, which can be put towards conversions to electric heat pumps, and not gas	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.

<sup>1</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

<sup>2</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

equipment, through the Greener Homes Loan. <sup>3</sup>		
(iv) That heat pumps could save a customer approximately \$1,200 in annual heating costs versus a gas furnace for a house with a moderate heat load (or whatever EPCOR's estimated savings are). <sup>4</sup>	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.
(v) That EPCOR may charge customers for a connection depending on the distance of the building from the road.	Yes	Comprehensive information is readily available on the EPCOR Gas community expansion website, including information regarding the extra length charge under the Cost to of Natural Gas Service section.
(vi) That heat pumps result in lower annual energy costs compared to traditional gas equipment for home heating	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.
(vii) That heat pumps significantly reduce summer cooling costs.	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.
(viii) That natural gas is a potent greenhouse gas and its combustion generates approximately 1/3 <sup>rd</sup> of Ontario's greenhouse gas emissions. <sup>5</sup>	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.
(ix) That heat pumps result in far less greenhouse gas emissions than gas furnaces. <sup>6</sup>	No	The Municipality of Brockton did not request information from EPCOR regarding non-natural gas solutions.

<sup>3</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

<sup>4</sup> EB-2022-0249, Exhibit I.ED.16, Attachment 7, Ottawa, 4 Ton Heating Load, "Cost savings" row, averaged; EB-2022-0249, Exhibit I.ED.5.

<sup>5</sup> EB-2022-0249, Exhibit I.ED.5.

<sup>6</sup> *Ibid.*

## Interrogatory # 2.0-ED-4

Reference: Exhibit D

Question(s):

- (a) Please provide a table showing individually for each component of the project: (i) the design hour capacity, (ii) the forecast design hour demand if the full customer attachment/revenue forecast materializes, (iii) the design hour capacity if EPCOR were to use the next smallest sized pipe, and (iv) the cost savings from using the next smallest size pipe.
- (b) Individually for each component of the project, please indicate whether EPCOR could downsize the pipe, *or part of the pipe*, and still meet the demand underlying the revenue forecast. Please provide a full explanation, including a quantification of the savings from downsizing.

**EPCOR Response:** This information is not available in the form requested. EPCOR utilizes the services of Cornerstone Energy Services, an engineering consultant to model the proposed project in its entirety, optimizing the system to provide design requirements based on the system pressures and customers along the proposed project network.



### Interrogatory # 3.0-ED-5

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

Questions:

- (a) Please provide a table showing, of the respondents likely to connect to natural gas (incl. likely, very likely, and extremely likely), how many and what percent have each of the following space heating systems (# and %): electric baseboard, electric heat pump, electric other, propane, oil, wood, and other.
- (b) Please provide a table showing, for each of the respondents likely to connect to natural gas (incl. likely, very likely, and extremely likely) that use oil heating, what is the size of their household and what is their household income (confirming whether that be before or after tax income).
- (c) Please provide the fully granular results from the surveys in a live excel spreadsheet. Please include descriptive column headings (not simply reference to survey question numbers). Please include a key or data label table if necessary to understand the responses.
- (d) Please provide the fully granular survey materials, including any letters sent to residents, door-to-door survey materials, online survey questions, and CATI survey questions.
- (e) CATI survey question materials can be difficult to understand in their “raw” form. Please provide a question mapping document and any other available materials to help the reader understand which questions are asked and when.
- (f) Please indicate the number of respondents with air conditioning. If that question was not asked, please provide an average number based on Ontario’s housing stock or EPCOR’s equipment surveys.
- (g) Please provide the approximate average age for customers’ propane furnaces. Please provide this figure for all respondents with a propane furnace and for the subset of customers likely to connect to the gas system (incl. likely, somewhat likely, and extremely likely).

**EPCOR Response:** EPCOR is not in possession of the excel backup used to produce the survey provided in Exhibit B, Tab 1, Schedule 1, Attachment 1. All available information was included in the survey provided in the application.

**Interrogatory # 3.0-ED-6**

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

Questions:

- (a) Please confirm when the Innovative Research survey was actually conducted in the community.

**EPCOR Response:** January 2020.

- (b) Please justify EPCOR's decision to rely on a survey conducted over three years ago despite changes in the market since that time.

**EPCOR Response:** In the neighbouring Southern Bruce project, EPCOR has experienced attachment results which have largely met the expectations of the CIP.

- (c) Please complete the following table comparing certain market factors at the time the EPCOR survey was conducted versus now. If other market factors have changed, please add those at the end of the table.

**EPCOR Response:** Please refer to the preamble at the beginning of this section. Additional information has been added where relevant.

Market Developments Since Customer Attachment Survey Was Conducted		
	When attachment survey was conducted	Current status
Gas commodity charges (\$/m <sup>3</sup> )	11.5114 ¢ per m <sup>3</sup>	16.3574 ¢ per m <sup>3</sup>

Gas distribution charges (variable, \$/m <sup>3</sup> )	Refer to decision EB-2019-0264, June 4, 2020	Refer to decision EB-2023-0270, Sept 21, 2023
Gas distribution charges (fixed charges, on an annual basis)	Refer to decision EB-2019-0264, June 4, 2020	Refer to decision EB-2023-0270, Sept 21, 2023
Availability of a \$5,000 rebate for customers to switch to high-efficiency electric heat pumps <sup>7</sup>	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer. Please refer to the Canada Greener Homes program website for information on loans currently offered by the federal government for qualifying air source heat pumps.	
Availability of an <i>additional</i> \$5,000 in rebates for customers to switch from oil to high-efficiency electric heat pumps if they earn a median income or lower (e.g. \$122,000 after-tax income for a family of 4 in Ontario) through the Oil to Heat Pump Affordability Program. <sup>8</sup>	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer. Please refer to the Canada Greener Homes program website for information on loans currently offered by the federal government for qualifying air source heat pumps.	
Availability of up to \$40,000 in interest free loans, which can be put towards conversions to electric heat pumps, and not gas equipment, through the Greener Homes Loan. <sup>9</sup>	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer. Please refer to the Canada Greener Homes program website for information on loans currently offered by the federal government for qualifying air source heat pumps.	
EPCOR infill customer connection charges policy	No charge for first 30 m.	No charge for first 30 m.

<sup>7</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

<sup>8</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

<sup>9</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

Annual costs to heat with gas (commodity and distribution)	\$1,197	\$1,314 <sup>10</sup>
Annual costs to heat with an electric heat pump (energy and any incremental distribution)	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer. Please refer to the Canada Greener Homes program website for information on loans currently offered by the federal government for qualifying air source heat pumps.	
Annual costs to cool with traditional air conditioner	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer. Please refer to the Canada Greener Homes program website for information on loans currently offered by the federal government for qualifying air source heat pumps.	
Annual costs to cool with a cold-climate heat pump	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer. Please refer to the Canada Greener Homes program website for information on loans currently offered by the federal government for qualifying air source heat pumps.	

<sup>10</sup> Application, Exhibit B - Table 1: Cost Comparison of Alternative Energy Sources

### Interrogatory # 3.0-ED-7

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

Questions:

- (a) Please complete the following table to confirm which of the following facts EPCOR communicated to customers in its surveys (and for any that were communicated, please provide the communication including a pinpoint reference to where that fact is contained):

**EPCOR Response:** Please refer to the information in the table below and the preamble at the beginning of this section.

Information Communicated to Customers		
Information	Whether communicated to the customers (Y/N)	If no, why not; if yes, where & when
(i) That the federal government is offering \$5,000 rebates for customers to switch to high-efficiency electric heat pumps, which are not available for gas furnaces. <sup>11</sup>	No	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer.
(ii) That the federal government is offering an <i>additional</i> \$5,000 in rebates for customers to switch from oil to high-efficiency electric heat pumps if they earn a median income or lower (e.g. \$122,000 after-tax income for a family of 4 in Ontario) through	No	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer.

<sup>11</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

the Oil to Heat Pump Affordability Program. <sup>12</sup>		
(iii) That the federal government is now providing up to \$40,000 in interest free loans, which can be put towards conversions to electric heat pumps, and not gas equipment, through the Greener Homes Loan. <sup>13</sup>	No	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer.
(iv) That heat pumps could save a customer approximately \$1,200 in annual heating costs versus a gas furnace for a house with a moderate heat load (or whatever EPCOR's estimated savings are). <sup>14</sup>	No	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer.
(v) That EPCOR may charge customers for a connection depending on the distance of the building from the road	Yes	Comprehensive information is readily available on the EPCOR Gas community expansion website, including information regarding the extra length charge under the Cost to of Natural Gas Service section.
(vi) That heat pumps result in lower annual energy costs compared to traditional gas equipment for home heating	No	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer.
(vii) That heat pumps significantly reduce summer cooling costs.	No	As a natural gas utility, EPCOR is not in a position to provide

<sup>12</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

<sup>13</sup> EB-2022-0249, Exhibit I.ED.20 & Exhibit I.ED.5.

<sup>14</sup> EB-2022-0249, Exhibit I.ED.16, Attachment 7, Ottawa, 4 Ton Heating Load, "Cost savings" row, averaged; EB-2022-0249, Exhibit I.ED.5.

		information regarding programs for electric end-use equipment which the Company does not administer.
(viii) That natural gas is a potent greenhouse gas and its combustion generates approximately 1/3 <sup>rd</sup> of Ontario's greenhouse gas emissions. <sup>15</sup>	No	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer.
(ix) That heat pumps result in far less greenhouse gas emissions than gas furnaces. <sup>16</sup>	No	As a natural gas utility, EPCOR is not in a position to provide information regarding programs for electric end-use equipment which the Company does not administer.

<sup>15</sup> EB-2022-0249, Exhibit I.ED.5.

<sup>16</sup> *Ibid.*

**Interrogatory # 3.0-ED-8**

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

Questions:

- (a) Please complete the following table showing the typical or average costs for a home to convert to methane gas space heating from different existing heating systems, including all costs, such as ductwork required for conversions from electric baseboards. Please include both EPCOR's best estimates and the figures provided to customers in the Innovative Research Group surveys.

**EPCOR Response:** Please refer to the table below for information provided in the Innovative Research Group Survey. EPCOR has not established "best estimates" delineated in the manner sought by ED.

Existing Equipment	Figure used in Innovative Research Group Survey
Electric baseboards (no ductwork)	\$10,000 – \$16,000
Electric forced-air furnace	\$4,000 - \$5,000
Electric heat pump	\$4,000 - \$5,000 (Assuming Duct Work in Home Already)
Oil furnace	\$4,000 - \$5,000
Propane furnace	\$750 - \$1,500



**Interrogatory # 3.0-ED-9**

Reference: Exhibit B, Tab 1, Schedule 1, p. 3

Questions:

- (a) Please reproduce the customer attachment forecast broken down by the current customer primary heating system/fuel. Please make and state assumption as necessary (e.g. EPCOR may estimate the fuel type of connecting customers based on the proportions of customers with that fuel type indicating an interest in converting to gas in the surveys). Please provide the underlying calculations. We are most interested in the overall totals after 10 years, but please also provide the annual breakdown if possible.

**EPCOR Response:** EPCOR does not forecast attachments by existing fuel type and therefore cannot provide the requested information. The Company cautions against estimating the existing fuel type of connecting customers based on fuel type information from the market research, as actual connections can vary.

**Interrogatory # 3.0-ED-10**

Reference: Exhibit E

Questions:

- (a) Please provide a copy of the most recent eight quarterly reports for schedule 2 community expansion projects that EPCOR is required to prepare and submit pursuant to s. 10.1(1) or O. Reg. 24/19.

**EPCOR Response:** Please refer to Attachment 3-ED-10 included in this document.

- (b) If there are any discrepancies between the information in the quarterly reports pertaining to the Brockton project and the information in this application, please detail those in a table with a reconciliation of the differences.

**EPCOR Response:** There are no discrepancies to detail.



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**October 6, 2022**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q3 2022 (July - September)
Submission date:	October 1, 2022
1.	<p>The status of any community consultations undertaken by the gas distributor in respect of the project.</p> <p>Project open house held at the Cargill Community Centre on June 27, 2022. A virtual open house was also held for a two week period starting June 21<sup>st</sup> and ending July 5<sup>th</sup>. The 30 day comment period ended on July 22<sup>nd</sup>. Following which the draft Environmental Report was compiled and posted on the EPCOR Brockton NG webpage, with notification sent out to OPCC members and First Nation and Metis communities for review. The initial review period is following 42 days of review on October 7<sup>th</sup>. We are however expecting more time required for the FN communities to complete there review and as such the submission timeline of the LTC is contingent on this.</p>
2.	<p>The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.</p> <p>Leave to Construct application is required for the Brockton Expansion Project. Current schedule of submission of the LTC is targeting October/November 2022 submission timeline. Timeline for submission is contingent on receiving full comments from FN and Metis Communities for the application.</p>
3.	<p>Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.</p> <p>Leave to Construct and associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)).</p>
4.	<p>The schedule for construction of the project and the progress made in the preceding quarter.</p> <p>The Brockton Expansion Project is targeting a spring (Q2) 2024 construction initiation.</p>
5.	<p>Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.</p> <p>The targeted project in service date for initial customer connections is August (Q3) 2024. Customer connection focus has always been in 2024 now with the entire focus in that period.</p>



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6.	The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:
	Total 10 Yr. Forecasted Connections: 501 <b><u>Status of Connected Customers</u></b> Residential: 0/481 Commercial/Institutional/Agricultural: 0/15 Industrial: 0/5
7.	The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.
	No variance account setup with respect to the project at this point in time. A variance account application has been submitted for the Southern Bruce Project. This project is contingent on the results of that application.



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**October 12, 2023**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q3 2023 (July – September 2023)
Submission date:	October 2, 2023
1.	<p>The status of any community consultations undertaken by the gas distributor in respect of the project.</p> <p>Community consultation has essentially been completed. Feedback and comments have now been received from SON on the Environmental Report. EPCOR will need to update the ER draft submitted as part of the LTC and produce a final copy of the document. EPCOR will be holding a community engagement session on October 18<sup>th</sup> in Cargill to provide an overall update on the project and answer any questions of interested parties regarding the updated scope of the Project.</p>
2.	<p>The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.</p> <p>The Leave to Construct has been submitted to the OEB on June 29<sup>th</sup>, 2023. EPCOR is in the process of responding to Interrogatory Requests submitted by OEB, Environmental Defence and Enbridge.</p>
3.	<p>Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.</p> <p>Leave to Construct process initiated. Associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)). Stage II archaeology work is currently underway with Stantec and SON targeting to be completed prior to November.</p>
4.	<p>The schedule for construction of the project and the progress made in the preceding quarter.</p> <p>The Brockton Expansion Project is targeting a spring (Q2) 2024 construction initiation. This is still the current target for the Project.</p>
5.	<p>Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.</p> <p>The targeted project in service date for initial customer connections is August (Q3) 2024. Customer connection focus has always been in 2024 now with the entire focus in that period.</p>
6.	<p>The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:</p>



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	<p>A staged approach has been determined for the Project. Stage 1 proposed to start construction in 2024 and Stage II to occur once additional NGEP funding is achieved.</p> <p>Stage 1 Total 10 Yr. Forecasted Connections: 423 <b><u>Status of Connected Customers</u></b> Residential: 0/406 Commercial/Institutional/Agricultural: 0/13 Industrial (Seasonal): 0/4</p>
7.	<p>The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.</p>
	<p>Two variance accounts have been submitted as part of the LTC application. A Customer Volume Variance Account and an Excess Soils Variance Account. Additional detail on these account can be found in the LTC application for the Project (EB-2022-0246).</p>



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**January 5, 2023**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q4 2022 (October – December)
Submission date:	January 1, 2023
1.	The status of any community consultations undertaken by the gas distributor in respect of the project.
	Community consultation has essentially been completed. Engagement with Metis and FN communities is undergoing with feedback still required on the draft Environmental Report from SON and MNO. The comments and feedback are expected toward the end of 2023, at which time further communication and consultation will occur in order to finalize the Environmental Report for use in LTC application.
2.	The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.
	EPCOR has yet to receive the full and complete comments from the Saugeen Ojibway Nation ("SON") to the draft Environmental Report required for the Leave to Construct application. The current and most up-to-date timeline for receipt of these comments is by the end of January 2023. At which time EPCOR will need to review these comments and amend the Environmental Report as required prior to submitting LTC. It was mentioned previously that this timeline is contingent on these comments and we are with the understanding the FN is working to complete this for EPCOR shortly. EPCOR at this time is looking to submit the LTC before the end of Q1 2023.
3.	Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.
	Leave to Construct and associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)).
4.	The schedule for construction of the project and the progress made in the preceding quarter.
	The Brockton Expansion Project is targeting a spring (Q2) 2024 construction initiation. This is still the current target for the Project.
5.	Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.
	The targeted project in service date for initial customer connections is August (Q3) 2024. Customer connection focus has always been in 2024 now with the entire focus in that period.



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6.	The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:
	Total 10 Yr. Forecasted Connections: 501 <b><u>Status of Connected Customers</u></b> Residential: 0/481 Commercial/Institutional/Agricultural: 0/15 Industrial: 0/5
7.	The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.
	No variance account setup with respect to the project at this point in time. A variance account application has been submitted for the Southern Bruce Project. This project is contingent on the results of that application.





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**January 1, 2022**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q4 2021 (October – December)
Submission date:	January 1, 2022
1.	<p>The status of any community consultations undertaken by the gas distributor in respect of the project.</p> <p>Communication with the 3 main Municipalities, Brockton, Chatsworth and West Grey have been initiated. Communities have been advised that EPCOR will require an amendment to its existing CPCN's for the areas the proposed project. This CPCN Amendment Application has been submitted to the OEB with public notice already being distributed. Received initial interrogatories from Enbridge and JAKO Developments with initial EPCOR responses provided back to OEB. New set of questions expected in early January 2022. Duty to Consult letter will be submitted to MENDM immediately following 2021 holiday to initiate First Nation consultation and further community consultation part of the LTC application and its requirements.</p>
2.	<p>The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.</p> <p>Leave to Construct application is required for the Brockton Expansion Project. Current schedule of submission of the LTC is slated for Q2 2022.</p>
3.	<p>Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.</p> <p>Leave to Construct and associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)).</p>
4.	<p>The schedule for construction of the project and the progress made in the preceding quarter.</p> <p>The Brockton Expansion Project is currently targeting a spring (Q2) 2023 construction initiation.</p>

5.	Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.
	Current targeted project in service date for initial customer connections September (Q3) 2023.
6.	The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:
	Total 10 Yr. Forecasted Connections: 501 <b><u>Status of Connected Customers</u></b> Residential: 0/481 Commercial/Institutional/Agricultural: 0/15 Industrial: 0/5
7.	The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.
	Not applicable. No variance account setup with respect to the project.



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**April 13, 2023**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q1 2023 (January – March 2023)
Submission date:	April 13, 2023
1.	The status of any community consultations undertaken by the gas distributor in respect of the project.
	Community consultation has essentially been completed. Feedback and comments still not fully received from SON, some communication back and forth. Uncertain if this was due to meetings MOE had with MNO regarding Duty to Consult. MNO comments received and to be incorporated in draft ER.
2.	The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.
	EPCOR has yet to receive the full and complete comments from the Saugeen Ojibway Nation ("SON") to the draft Environmental Report required for the Leave to Construct application. EPCOR has been engaged with MOE on project scope and feasibility. Discussions are ongoing and resolution to these conversations will be required in advance of EPCOR submitting LTC. EPCOR is anticipating submission of LTC in May 2023, but this is contingent on discussions with MOE.
3.	Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.
	Leave to Construct and associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)).
4.	The schedule for construction of the project and the progress made in the preceding quarter.
	The Brockton Expansion Project is targeting a spring (Q2) 2024 construction initiation. This is still the current target for the Project.
5.	Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.
	The targeted project in service date for initial customer connections is August (Q3) 2024. Customer connection focus has always been in 2024 now with the entire focus in that period.
6.	The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:



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	Total 10 Yr. Forecasted Connections: 500 <b><u>Status of Connected Customers</u></b> Residential: 0/480 Commercial/Institutional/Agricultural: 0/15 Industrial: 0/5
7.	The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.
	No variance account setup with respect to the project at this point in time. A variance account application has been submitted for the Southern Bruce Project. This project is contingent on the results of that application.



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**April 1, 2022**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q1 2022 (January – March)
Submission date:	April 1, 2022
1.	<p>The status of any community consultations undertaken by the gas distributor in respect of the project.</p> <p>Communication with the 3 main Municipalities, Brockton, Chatsworth and West Grey have been initiated. Conditional approval received for CPCN from OEB. Final approval to be received upon approval of LTC. Duty to Consult submitted to MOE, and now awaiting response to DTC assessment. Have started early engagement with First Nations that EPCOR expects to be impacted based on historical work on the Southern Bruce Project. Awaiting DTC assessment to finalize open house detail and coordinate date for this work.</p>
2.	<p>The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.</p> <p>Leave to Construct application is required for the Brockton Expansion Project. Current schedule of submission of the LTC is slated for Q2/Q3 2022.</p>
3.	<p>Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.</p> <p>Leave to Construct and associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)).</p>
4.	<p>The schedule for construction of the project and the progress made in the preceding quarter.</p> <p>The Brockton Expansion Project is currently targeting a spring (Q2) 2023 construction initiation.</p>
5.	<p>Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.</p>



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	Current targeted project in service date for initial customer connections September (Q3) 2023.
6.	The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:
	Total 10 Yr. Forecasted Connections: 501 <b><u>Status of Connected Customers</u></b> Residential: 0/481 Commercial/Institutional/Agricultural: 0/15 Industrial: 0/5
7.	The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.
	Not applicable. No variance account setup with respect to the project.



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**July 4, 2023**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q2 2023 (April – June 2023)
Submission date:	July 4, 2023
1.	The status of any community consultations undertaken by the gas distributor in respect of the project.
	Community consultation has essentially been completed. Feedback and comments still not fully received from SON. SON has expressed that they would like the Ecological Land Classification (ELC) document completed before providing comments on the ER. EPCOR is working to complete the ELC as soon as possible to share with the SON so that this step can be completed and appropriate comments are received and considered.
2.	The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.
	The Leave to Construct has been submitted to the OEB on June 29 <sup>th</sup> , 2023. It is currently undergoing OEB's preliminary review of the application.
3.	Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.
	Leave to Construct and associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)).
4.	The schedule for construction of the project and the progress made in the preceding quarter.
	The Brockton Expansion Project is targeting a spring (Q2) 2024 construction initiation. This is still the current target for the Project.
5.	Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.
	The targeted project in service date for initial customer connections is August (Q3) 2024. Customer connection focus has always been in 2024 now with the entire focus in that period.
6.	The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:



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	<p>A staged approach has been determined for the Project. Stage 1 proposed to start construction in 2024 and Stage II to occur once additional NGEF funding is achieved.</p> <p>Stage 1 Total 10 Yr. Forecasted Connections: 423 <b><u>Status of Connected Customers</u></b> Residential: 0/406 Commercial/Institutional/Agricultural: 0/14 Industrial: 0/4</p>
7.	<p>The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.</p>
	<p>No variance account setup with respect to the project at this point in time. A variance account application has been submitted for the Southern Bruce Project. This project is contingent on the results of that application.</p>





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**June 30, 2022**

Project Name:	Phase 2 Natural Gas Expansion - Brockton
Reporting Period:	Q1 2022 (April – June)
Submission date:	June 30, 2022
1.	<p>The status of any community consultations undertaken by the gas distributor in respect of the project.</p> <p>Communication with the 3 main Municipalities, Brockton, Chatsworth and West Grey have been initiated. Conditional approval received for CPCN from OEB. Final approval to be received upon approval of LTC. Duty to Consult directive received from MOE on May 30<sup>th</sup>, 2022. Continued engagement with SON, MNO, HSM, having met with administration to present Open House materials. Notification for project released through mail-out notice, newspaper advertisement, and facebook advertising. Virtual open house period initiated on June 21 for a two week period ending July 5<sup>th</sup>, and one in person open house held at the Cargill Community Centre on June 27<sup>th</sup> from 3pm – 8pm EDT. Awaiting closure of commentary period on July 22<sup>nd</sup>. Engaging municipalities of Chatsworth, West Grey and Brockton to update franchise agreement identified in bylaw.</p>
2.	<p>The expected timeline for the filing of an application for leave to construct a hydrocarbon line under section 90 of the Act, if such an application is required.</p> <p>Leave to Construct application is required for the Brockton Expansion Project. Current schedule of submission of the LTC is closer targeting September/October 2022.</p>
3.	<p>Progress updates on every necessary approval and permit for the project other than the leave to construct referred to above.</p> <p>Leave to Construct and associated permits not yet initiated. Post LTC Permits not yet initiated (MTO, Municipal Consent, PTTW, SVCA, Hydro One, CHAR, and MTCS (Archaeology)).</p>
4.	<p>The schedule for construction of the project and the progress made in the preceding quarter.</p> <p>The Brockton Expansion Project is currently targeting a spring (Q2) 2023 construction initiation.</p>

5.	Confirmation of the date on which the project is anticipated to come into service or the date on which the project came into service, as applicable.
	Current targeted project in service date for initial customer connections September (Q3) 2023 if feasible for customers, with primary focus for customer connections throughout 2024.
6.	The number of consumers in each of the following classes who have been connected or who are anticipated to be connected to the gas distributor's natural gas distribution system as a result of the project:
	Total 10 Yr. Forecasted Connections: 501 <b><u>Status of Connected Customers</u></b> Residential: 0/481 Commercial/Institutional/Agricultural: 0/15 Industrial: 0/5
7.	The amounts in any variance accounts established by the gas distributor under subsection 4 (2) in respect of the project.
	Not applicable. No variance account setup with respect to the project.

### Interrogatory # 3.0-ED-11

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) Please provide a table providing a table with a full reconciliation as between the estimated project costs in Table 1 and the amount estimated in the Company's original project proposal to the Government of Ontario (2019/2020) for funding under Phase 2 of the NGEP (EB-2019-0255).

### EPCOR Response:

Item	Description	Project Estimate (\$)	NGEP Estimate (\$)
Material Cost	MDPE pipe (NPS2, NPS4), fittings, stations, meters, services and service line components, etc.	\$2,405,484	\$ 2,256,851
Labour and Construction Cost	Labour and construction costs to install NPS2, NPS4, pressure reducing stations, meters, services and service line components.	\$15,505,788	\$20,457,949
External Costs	External engineering, consultation, land, surveying / locates, modeling, etc.	\$2,849,065	\$3,444,073
<b>Direct Capital Costs</b>		<b>\$20,760,337</b>	<b>\$26,158,873</b>
Contingency		\$3,966,812	\$2,226,478
<b>Subtotal</b>		<b>\$24,727,149</b>	<b>\$28,385,351</b>
Interest During Construction		\$218,010	\$ -
<b>Total Project Costs</b>		<b>\$24,945,159</b>	<b>\$28,385,351</b>

Note that the NGEP Estimate does not include interest during construction as it was presented using EBO 188 guidelines.

- (b) Please provide the complete copy of the above-referenced project proposal.

**EPCOR Response:** Please refer to 1-Staff-1c and attachment ENGLP\_APPL\_Brockton\_20200804\_Redacted 20231012.

- (c) Please provide the 40-year DCF table underling the project proposal to the Government of Ontario (2019/2020) for funding under Phase 2 of the NGEP (EB-2019-0255).

**EPCOR Response:** Attached at Appendix 3-ED-11 in this document and included as an excel workbook included with this submission.

EBO 188 - Brockton																	
Year		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
WACC	4.56%																
PV Factor (mid-year discounting)		1.00	0.98	0.94	0.89	0.86	0.82	0.78	0.75	0.72	0.68	0.65	0.63	0.60	0.57	0.55	0.52
Base Year for EBO 188	2022																
1. PV of Operating Cash Flow																	
1a) PV of Net Operating Cash																	
Revenue	\$ '000s	275	546	679	739	789	812	816	820	821	822	822	822	822	822	822	822
O&M and Overheads	\$ '000s	(90)	(241)	(216)	(216)	(213)	(212)	(212)	(211)	(211)	(211)	(225)	(225)	(225)	(225)	(225)	(225)
Net Working Capital	\$ '000s	(27)	(23)	(2)	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Operating Cash	\$ '000s	158	282	461	523	576	600	604	609	610	611	597	597	597	597	597	597
PV of Net Operating Cash	\$ '000s	158	276	431	468	492	491	472	456	437	418	391	374	357	342	327	313
1b) PV of Taxes																	
Municipal Taxes	\$ '000s	(32)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(64)	(102)	(102)	(102)	(102)	(102)	(102)
Income Taxes (before CCA and Interest Tax Shields)	\$ '000s	(40)	(64)	(105)	(122)	(135)	(142)	(143)	(144)	(145)	(145)	(131)	(131)	(131)	(131)	(131)	(131)
Total Taxes	\$ '000s	(73)	(128)	(170)	(186)	(200)	(206)	(207)	(209)	(209)	(209)	(233)	(233)	(233)	(233)	(233)	(233)
PV of Taxes	\$ '000s	(73)	(125)	(159)	(166)	(171)	(169)	(162)	(156)	(150)	(143)	(153)	(146)	(140)	(134)	(128)	(122)
2. PV of Capital																	
Capital Expenditures	\$ '000s	(28,385)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Customer Contributions	\$ '000s	20,344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Capital Expenditure	\$ '000s	(8,042)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PV of Capital	\$ '000s	(8,042)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. PV of CCA Tax Shield																	
CCA	\$ '000s	736	449	423	397	373	351	330	310	292	274	258	242	228	214	201	189
Tax Rate	%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%	26.50%
Tax Rate x CCA	\$ '000s	195	119	112	105	99	93	87	82	77	73	68	64	60	57	53	50
PV of CCA Tax Shield	\$ '000s	195	116	105	94	85	76	68	62	55	50	45	40	36	32	29	26
4. NPV and PI Calculations																	
		40-Year NPV Sum															
PV of Net Operating Cash	\$ '000s	10,807	158	276	431	468	492	491	472	456	437	418	391	374	357	342	313
PV of Taxes	\$ '000s	(4,098)	(73)	(125)	(159)	(166)	(171)	(169)	(162)	(156)	(150)	(143)	(153)	(146)	(140)	(134)	(122)
PV of CCA Tax Shield	\$ '000s	1,333	195	116	105	94	85	76	68	62	55	50	45	40	36	32	26
PV of Capital	\$ '000s	(8,042)	(8,042)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	\$ '000s	0	(7,761)	267	377	396	406	398	379	361	342	325	283	268	254	241	217
NPV	\$ '000s		(7,761)	(7,494)	(7,118)	(6,722)	(6,316)	(5,918)	(5,539)	(5,178)	(4,836)	(4,511)	(4,229)	(3,961)	(3,707)	(3,467)	(3,022)
Cumulative PV of Net Operating Cash, Taxes and CCA	\$ '000s		281	548	924	1,320	1,726	2,124	2,502	2,864	3,206	3,530	3,813	4,081	4,335	4,575	5,020
Cumulative PV of Capital	\$ '000s		(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)	(8,042)
PI	\$ '000s	1.00	0.03	0.07	0.11	0.16	0.21	0.26	0.31	0.36	0.40	0.44	0.47	0.51	0.54	0.57	0.62

2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062
0.50	0.48	0.46	0.44	0.42	0.40	0.38	0.37	0.35	0.34	0.32	0.31	0.29	0.28	0.27	0.26	0.25	0.23	0.22	0.21	0.21	0.20	0.19	0.18	0.17
822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)	822 (225)
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597	597
299	286	273	261	250	239	229	219	209	200	191	183	175	167	160	153	146	140	134	128	122	117	112	107	102
(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	(102) (131) (233)	
(117)	(112)	(107)	(102)	(98)	(94)	(89)	(86)	(82)	(78)	(75)	(72)	(68)	(65)	(63)	(60)	(57)	(55)	(52)	(50)	(48)	(46)	(44)	(42)	(40)
0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178 26.50%	167 26.50%	157 26.50%	148 26.50%	139 26.50%	131 26.50%	123 26.50%	115 26.50%	109 26.50%	102 26.50%	96 26.50%	90 26.50%	85 26.50%	80 26.50%	75 26.50%	70 26.50%	66 26.50%	62 26.50%	59 26.50%	55 26.50%	52 26.50%	49 26.50%	46 26.50%	43 26.50%	40 26.50%
47	44	42	39	37	35	33	31	29	27	25	24	22	21	20	19	18	17	16	15	14	13	12	11	11
24	21	19	17	15	14	12	11	10	9	8	7	7	6	5	5	4	4	3	3	3	3	2	2	2
299 (117) 24 0	286 (112) 21 0	273 (107) 19 0	261 (102) 17 0	250 (98) 15 0	239 (94) 14 0	229 (89) 12 0	219 (86) 11 0	209 (82) 10 0	200 (78) 9 0	191 (75) 8 0	183 (72) 7 0	175 (68) 7 0	167 (65) 6 0	160 (63) 5 0	153 (60) 5 0	146 (57) 4 0	140 (55) 4 0	134 (52) 3 0	128 (50) 3 0	122 (48) 3 0	117 (46) 3 0	112 (44) 2 0	107 (42) 2 0	102 (40) 2 0
206	195	186	176	168	160	152	144	137	131	125	119	113	108	103	98	93	89	85	81	77	74	70	67	64
(2,816)	(2,621)	(2,435)	(2,259)	(2,091)	(1,932)	(1,780)	(1,635)	(1,498)	(1,367)	(1,242)	(1,124)	(1,010)	(903)	(800)	(702)	(608)	(519)	(434)	(353)	(276)	(202)	(131)	(64)	0
5,226 (8,042) 0.65	5,421 (8,042) 0.67	5,607 (8,042) 0.70	5,783 (8,042) 0.72	5,951 (8,042) 0.74	6,110 (8,042) 0.76	6,262 (8,042) 0.78	6,406 (8,042) 0.80	6,544 (8,042) 0.81	6,675 (8,042) 0.83	6,799 (8,042) 0.85	6,918 (8,042) 0.86	7,031 (8,042) 0.87	7,139 (8,042) 0.89	7,242 (8,042) 0.90	7,340 (8,042) 0.91	7,433 (8,042) 0.92	7,522 (8,042) 0.94	7,607 (8,042) 0.95	7,689 (8,042) 0.96	7,766 (8,042) 0.97	7,840 (8,042) 0.97	7,910 (8,042) 0.98	7,978 (8,042) 0.99	8,042 (8,042) 1.00

**Interrogatory # 3.0-ED-12**

Reference: Exhibit E, Tab 1, Schedule 1

Question:

- (a) Please provide a table of figures showing, without rounding: the gross capital cost, the gross O&M costs over 40 years, the NPV of the O&M costs over 40 years, the subsidy, the gross revenue over 40 years, and the NPV of the revenue over 40 years

**EPCOR Response:**

Gross Capital Cost	\$24,727,149
Gross O&M Costs	\$11,491,656
NPV of O&M Costs	\$4,556,432
NGEP Funding	\$20,340,000
Gross Revenue	\$26,970,367
NPV Revenue	\$10,601,623

### Interrogatory # 3.0-ED-13

Reference: Exhibit E, Tab 1, Schedule 1

Question:

(a) Please complete the following table:

### EPCOR Response:

Capital Costs Per Customer	
Forecast gas customers (total)	423
Total capital costs	\$24,727,149
Capital costs per customer	\$58,457

(b) Please complete the following table:

Capital and Operating Costs Per Customer	
Forecast gas customers (total)	423
Total capital costs and gross O&M costs over 40 years	\$36,218,805
Capital and O&M costs per customer	\$85,624

(c) Please complete the following table:

Capital and Operating Costs Per Customer (Excl. Costs Covered by the Subsidy)	
Forecast gas customers (total)	423
Total capital costs and gross O&M costs minus the subsidy from existing customers	\$15,878,805
Capital and O&M costs per customer (excl. subsidy)	\$37,539

(a) Please complete the following table:

NGEP Subsidy from Existing Customers	
Forecast gas customers (total)	423
NGEP subsidy	\$20,340,000
NGEP subsidy per customer	\$48,085



**Interrogatory # 3.0-ED-14**

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) If there are significant revenue shortfalls or cost overruns in years 1 through 10 that occur, does EPCOR undertake not to seek to recoup the amounts from existing EPCOR customers at the first rebasing case after the end of the rate stability period? Please explain the answer.
- (b) If EPCOR does not provide that undertaking, who will ultimately cover the cost of revenue shortfalls or capital cost overruns that accrue in years 1 through 10, EPCOR customers or EPCOR shareholders? Please explain the answer.
- (c) If there are significant revenue shortfalls in years 11 through 40, does EPCOR undertake not to seek to recoup the amounts from existing EPCOR customers? Please explain the answer.
- (d) If EPCOR does not provide that undertaking, who will ultimately cover the cost of revenue shortfalls that accrue in years 11 through 40, EPCOR customers or EPCOR shareholders? Please explain the answer.

**EPCOR Response (Parts a-d):** EPCOR will apply a 10-year rate stability period (RSP) during which the Company will bear the risk of the Project customer attachment and capital expenditure forecast vs. actuals. EPCOR will file the actual costs and revenues of the Project with the OEB for consideration of inclusion in rates in the rebasing application following the conclusion of the RSP. For these reasons, it is premature and unnecessary to make any further commitments with regard to cost recovery at this time.

**Interrogatory # 3.0-ED-15**

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

(a) What is EPCOR's rate base for its Ontario gas business?

**EPCOR Response:** As per EB-2018-0264, EPCOR Southern Bruce's projected rate base as approved is:

<b>Year</b>	<b>Rate Base (000's)</b>
2019	24,475
2020	54,219
2021	60,191
2022	60,945
2023	60,890
2024	60,324
2025	59,120
2026	57,627
2027	56,326
2028	54,946

EPCOR Aylmer's approved rate base is as per its most recent cost of service filing (EB-2018-0336) is \$16,355,800 (2020 Test Year).

(b) What is EPCOR's revenue requirement for its Ontario gas business?

**EPCOR Response:**

ENGLP Southern Bruce: ENGLP Southern Bruce was approved for a 10-year revenue requirement of \$85,591,000

ENGLP Aylmer: \$6,253,420 (2020T)

- (c) When would the assets being built in the Brockton gas expansion project be fully depreciated according to EPCOR's existing depreciation policies?

**EPCOR Response:** 2067, because plastic mains have a depreciable life of 43 years or 2.31% based on CIP depreciation rates agreed upon with Enbridge.

- (d) How much of the capital for this project would remain undepreciated by 2050?

**EPCOR Response:** Based on preliminary designs, EPCOR anticipates a balance of \$1.3M net of the NGEP Grant. Note that this is a forecast based on limited information and actual results may vary.

- (e) What is EPCOR's depreciation period for plastic mains and plastic services?

**EPCOR Response:**

Asset Description	Annual Depreciation	Useful Life (Years)
Plastic Mains	2.31%	43.3
Plastic Services	2.51%	39.8

### **Interrogatory # 3.0-ED-16**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Preamble:

Questions:

- (a) Please reproduce the DCF table with an illustrative scenario where customer attachments each year are 50% of those forecast. EPCOR does not need to agree this scenario is likely – it is intended to illustrate the cost impacts.
- (b) With respect to the response to (a), please provide (i) the revenue deficiency over the first 10 years (both gross and NPV) and the (ii) the revenue deficiency over the remaining 30 years (both gross and NPV).
- (c) If this scenario would occur and existing customers were to bear the cost of the shortfalls, how would that impact the rates of existing customers?

**EPCOR Response:** The Company respectfully declines to provide the requested information. The scenarios suggested by ED are arbitrary and have no basis and can likely only be used to draw oversimplified conclusions as any adjustments made to parameters like the attachment forecast would result in other Project components/scope being re-assessed/adjusted accordingly. The Company cautions against drawing conclusions based on selective modifications to components of the proposed Project, such as attachment forecasts, without consideration of all Project components in a holistic manner.

**Interrogatory # 3.0-ED-17**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) Please complete the following table showing the outcomes in various scenarios in terms of the profitability index, NPV, and gross revenue deficiency. EPCOR does not need to agree these scenarios are likely.

<b>Cost Impact of Different Customer Attachment / Revenue Scenarios</b>					
	Profitability index	NPV	Revenue deficiency (years 1-10)	Revenue deficiency (years 11-40)	Revenue deficiency (years 1-40)
Volumes plateau in year 5 and do not increase					
After year 10, 10 customers exit the system each year (net)					
Volumes are 20% less than forecast each year					

**EPCOR Response:** The Company respectfully declines to provide the requested information. The scenarios suggested by ED are arbitrary and have no basis and can likely only be used to draw oversimplified conclusions as any adjustments made to parameters like the attachment forecast would result in other Project components/scope being re-assessed/adjusted accordingly. The Company cautions against drawing conclusions based on selective modifications to components of the proposed Project, such as attachment forecasts, without consideration of all Project components in a holistic manner.

**Interrogatory # 3.0-ED-18**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) Please describe all studies and analysis that EPCOR has undertaken to determine the likelihood of residential customers switching from gas to electric heat pumps before the end of the 40-year revenue horizon (if any). Please file any studies or assessments that were undertaken.

**EPCOR Response:** Please refer to the survey in B\_1\_1\_Attachment 1 of the original application for the information available.

- (b) Please confirm that customers with propane furnaces that attach to EPCOR's system will be able to convert their existing furnaces to burn methane gas without replacing those furnaces?

**EPCOR Response:** EPCOR expects that this would be the case but cannot confirm in entirety, as there may be different situations and scenarios within individual homes/businesses.

- (c) What is the estimate average age of propane furnaces for EPCOR customers in the expansion area? Please base the average on the best available information, including the Innovative Research Group survey results, and confirm whether the answer has added three years to the average life to reflect the passage of three years since the survey was conducted.

**EPCOR Response:** This information is not available. Please refer to the survey in B\_1\_1\_Attachment 1 of the original application for the information available.

- (d) If a customer with a propane furnace converts it to methane gas to connect to EPCOR's system, please confirm that they could subsequently switch away from EPCOR's system in favour of an electric heat pump when their furnace reaches the end of its life.

**EPCOR Response:** Confirmed.

**Interrogatory # 3.0-ED-19**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) Enbridge does not charge customers to close an account and stop receiving gas service. Does EPCOR have the same policy? If not, please describe EPCOR's charges for this and the basis on which EPCOR can charge its customers for closing an account, with specific reference to EPCOR's conditions of service.

**EPCOR Response:** A customer is not charged for closing their account and stopping receiving service, unless they have never used the service at all. In that case, the customer is charged the cost of the installation. This charge can be found in EPCOR-Southern Bruce's approved schedule of miscellaneous service charges

- (b) Enbridge is proposing not to charge customers for "cut off at main," wherein a customer not only closes their account but has their service line and meter removed by Enbridge. Does EPCOR have the same policy? If not, please describe EPCOR's charge for removing its assets from a customer's property and the basis on which EPCOR can charge its customers for this, with specific reference to EPCOR's conditions of service.

**EPCOR Response:** EPCOR does not charge for removal of a service where it has been "cut off at the main". The only instance where this could occur is if there is a demolition or renovation where the service will no longer ever be needed. If the Customer just does not want to use their service any longer, EPCOR will typically cap the service at the riser and remove the meter and leave the pipe in the ground for future use.

### Interrogatory # 3.0-ED-20

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) Please provide a table showing the forecast revenue from forecast rate 6 and rate 11 customers as a percent of the total forecast revenue.

**EPCOR Response:** As per the table presented in attachment 3-Staff 5.

		Revenue	% of Total
Rate 1	\$000s	13,369.86	51%
Rate 6	\$000s	6,605.96	25%
Rate 11	\$000s	6,332.00	24%
Sum	\$000s	26,307.82	100%

- (b) Please provide a table listing the type of business for each of the 17 rate 6 and rate 11 customers that are forecast to connect to the system, including an assessment of the likelihood that they will remain in business and on the gas system for 40 years.

**EPCOR Response:** This information is not available.

- (c) Please explain why *none* of the proposed rate 6 and rate 11 customers would be covered by the 20-year revenue horizon under EBO 188.

**EPCOR Response:** The revenue generated by the forecast connection of Rate 6 and Rate 11 customers are covered by the revenue horizon under EBO 188.

- (d) Please provide a table showing, for each of the 17 rate 6 and rate 11 customers that are forecast to connect to the system, whether EPCOR has received a firm and binding commitment that they will connect. If a binding commitment has not be received, please describe exactly what assurances EPCOR has that the customers will connect.

**EPCOR Response:** EPCOR is of the understanding that we are unable to receive a binding commitment without Leave to Construct approval. Current assurances



(assumptions) are based on historical Southern Bruce connection trends and customer feedback.

(e) Please describe the criteria for rate classes 1, 6, and 11.

**EPCOR Response:** As per ENGLP Southern Bruce's current approved rate order , (EB-2023-0270, Sept 21 decision).

Rate 1 - Any customer in EPCOR's Southern Bruce Natural Gas System who is an end user and whose total gas requirements are equal to or less than 10,000 m<sup>3</sup> per year.

Rate 6 - Any customer in EPCOR's Southern Bruce Natural Gas System who is an end user and whose total gas requirements are greater than 10,000 m<sup>3</sup> per year.

Rate 11 - Any customer in EPCOR's Southern Bruce Natural Gas System who is an end user and whose gas requirements are only during the period of May 1 through Dec 15 inclusive and are greater than 10,000 m<sup>3</sup>.

**Interrogatory # 3.0-ED-21**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) Please provide a full breakdown of the incremental capital costs shown in the DCF table, including a breakdown showing the connection costs included in the incremental capital.

**EPCOR Response:** Attachment 3-ED-21 included below provides the full breakdown of the incremental capital costs shown in the DCF.

- (b) Please explain how the incremental capital figures in the DCF table were determined and provide all underlying figures and assumptions.

**EPCOR Response:** Incremental capital figures were determined through EPCOR's master service level agreement currently in place with its contractor as well as through historical review of distribution, regulating station and services installed across the Southern Bruce area.

- (c) Please indicate which of the following costs are included in the incremental capital costs shown in the DCF table:
  - (i) The full cost of service lines, meters, regulators, and other capital needed to connect additional conversion customers (i.e. infills);
  - (ii) The cost of service lines, meters, regulators, and other capital needed to connect additional conversion customers (i.e. infills), minus the extra length charges (ELC) that will be required by infill customers;
  - (iii) The full cost of mains that are required in new developments (if any form part of the connection/revenue forecast);
  - (iv) The full cost of mains that are required in new developments (if any form part of the connection/revenue forecast), minus contributions in aid of construction that will be required by developers;
  - (v) Incremental overheads; and

(vi) Normalized system reinforcement costs.

**EPCOR Response:** Items (i), (ii) and (v) are included in the incremental capital costs. Items (iii), (iv) and (vi) are not included in the incremental capital costs. For (iii) and (iv), there are no new developments that form part of the Project. For (vi), normalized reinforcement costs are not applicable to community expansion projects. All reinforcement costs associated with the Project are directly applied in the DCF analysis for the Project.

### Appendix 3-ED-21 Incremental Capital Cost

	<b>Total</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>
<b>Customer Service Installations</b>	425	295	38	23	23	22	11	8	4	1	0
<b>Distribution Mains</b>	\$20,524,939	\$20,524,939	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Distribution Mains Incremental Overheads</b>	\$1,080,260	\$1,080,260	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Customer Services</b>	\$2,325,311	\$1,754,461	\$257,000	\$79,000	\$76,000	\$76,000	\$38,000	\$28,000	\$13,300	\$3,800	\$0
<b>Customer Services Incremental Overheads</b>	\$122,490	\$92,340	\$14,000	\$4,000	\$4,000	\$4,000	\$2,000	\$1,000	\$700	\$200	\$0
<b>Regulating Stations</b>	\$641,250	\$641,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Regulating Stations Incremental Overheads</b>	\$33,750	\$33,750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Gross Capital Cost</b>	\$24,728,000	\$24,127,000	\$271,000	\$83,000	\$80,000	\$80,000	\$40,000	\$29,000	\$14,000	\$4,000	\$0
<b>NGEP Funding</b>	(\$20,340,000)	(\$20,340,000)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Net Capital Cost</b>	<b>\$4,338,000</b>	<b>\$3,787,000</b>	<b>\$271,000</b>	<b>\$83,000</b>	<b>\$80,000</b>	<b>\$80,000</b>	<b>\$40,000</b>	<b>\$29,000</b>	<b>\$14,000</b>	<b>\$4,000</b>	<b>\$0</b>

Note: The values above differ from the table in 3-ED-11 due to the exclusion of incremental O&M and interest during construction amounts.

### Interrogatory # 3.0-ED-30

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Preamble:

These questions relate to the costs of individual customer attachments (i.e. dedicated service line and meter), the portion of those costs that will be borne via up-front payments by customers considering a switch to gas, and how this might impact the number of attachments as customers consider gas versus heat pumps.

Questions:

- (a) Please describe EPCOR's charges for connecting individual homes situated near mains (i.e. infills) to its network (i.e. the equivalent to Enbridge's Extra Length Charge). These charges would include the individual customer's service line, meter, and regulator.
- (b) Please confirm that individual customer connection charges apply in community expansion areas. If not, please explain, including an explanation as to when that changed, why that changed, and whether approval was sought from the OEB for that change.
- (c) Please provide a table showing, for all the buildings in the project area, the *approximate* length of service line that will be required. If EPCOR does not have that information, please obtain it on an approximate basis using mapping tools. The list does not need to use addresses. Please use simplifying assumptions if EPCOR wishes to do so (e.g. that the service line will run in a straight line from the edge of the shoulder to the nearest point on the house). [Note that this should not be onerous, and Environmental Defence would complete the task if it was permitted to submit evidence. We tested this task with Google Maps, and we were able to record measurements of approximately 5 buildings per minute.]
- (d) Please add to the table from (c): the approximate connection charge that would apply for that building (pre-tax) and the total including tax (if tax is applied).

**EPCOR Response:** As per EPCOR's conditions of service, customers would not be charged if they are within the standard connection allowance distance.

## **Interrogatory # 3.0-ED-22**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Preamble:

EBO 188 Appendix B Guidelines state:

### **2. STANDARD TEST FOR FINANCIAL FEASIBILITY**

The standard test for determining the financial feasibility at both the project and the portfolio level will be a DCF analysis, as set out below.

#### **2.1 DCF Calculation and Common Elements**

...

For capital costs, the common elements will be as follows:

- (a) an estimate of all costs directly associated with the attachment of the forecast customer additions, including costs of distribution mains, services, customer stations, distribution stations, land and land rights;
- (b) an estimate of incremental overheads applicable to distribution expansion at the portfolio level; and
- (c) an estimate of the normalized system reinforcement costs.

Questions:

- (a) Please provide a table showing for each year and as a total: (i) the incremental overheads and (ii) the normalized system reinforcement costs.

**EPCOR Response:** Please see response to 3.0-ED-21 Table 1 above.

- (b) Please reproduce the DCF table with rows breaking out the incremental capital costs as between direct costs, incremental overheads, and normalized system reinforcement costs. If any of those costs are not included, please reproduce the DCF table including those costs.

**EPCOR Response:** Please see response to 3.0-ED-21 Table 1 above.

(c) If EPCOR does not include normalized system reinforcement costs, please explain why.

**EPCOR Response:** Normalized reinforcement costs are not applicable to community expansion projects. All reinforcement costs associated with the Project are included in the DCF analysis for the Project.

**Interrogatory # 3.0-ED-23**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) What is the average cost to connect a customer to EPCOR's network across the whole network?

**EPCOR Response:** Customer connection costs can vary widely depending on many factors. EPCOR's average cost to connect a customer in 2023 is \$5,500.

- (b) What is the average cost to connect a customer to EPCOR's network for homes that are 20 meters or more away from the pipe?

**EPCOR Response:** EPCOR's Terms and Conditions indicate the additional customer charge for customers with service lengths >30m. EPCOR currently charges \$37.59 per meter, which is calculated based on expected costs.

- (c) What is the forecast average all-in cost to connect a new residential customer *in the project area*, including the cost of the meter, regulator, the pipe serving that specific customer, and the installation costs? Please differentiate between conversions and new build customers if possible. Please also include a breakdown between direct costs, incremental overheads, and normalized system reinforcement costs.

**EPCOR Response:** The forecasted average all-in cost to connect a new customer in the project area is \$5,500. For additional information, please see response to 3.0-ED-21 Table 1 above.

- (d) Please confirm that individual customer connections are subject to EBO 188.

**EPCOR Response:** The project PI was calculated based on the project as a whole. As a result, individual customer connections within this infrastructure included in this defined project are not subject to EBO 188.

- (e) Please confirm whether the charges for infill customers are sufficient to meet the 40-year revenue horizon maximum in EBO 188.



**EPCOR Response:** The project PI was calculated based on the project as a whole, which results in a value of 1. Under this projection, charges are sufficient as they are part of the overall revenue projection.

- (f) How much connection capital can be supported with the revenue from one individual residential customer while maintaining a profitability index of 1? Please provide answers with and without including the system expansion surcharge (SES).

**EPCOR Response:** This information is not available as the project PI was calculated based on the project as a whole. As a result, individual customer connections are not subject to EBO 188.

- (g) Please provide a table showing, for each year, the forecast customer attachments, the estimated average cost to attach a customer (e.g. the meter, the pipe serving that customer only, labour, etc.), the estimated cost that will be covered by rates, and the estimated cost that will be covered by the customers directly.

**EPCOR Response:** Please see responses to 3.0-ED-21 Table 1 and 3.0-ED-23(c).

- (h) Please reproduce the DCF table with a row showing the customer attachment costs (i.e. the meter, the pipe serving that customer only, labour, etc.) for each year broken out from other costs. If those costs are not included, please reproduce the DCF table including those costs.

**EPCOR Response:** Please see responses to 3.0-ED-21 Table 1 and 3.0-ED-23(c).

- (i) What are the average incremental operational costs for EPCOR per average residential customer (e.g. billing, etc). Please provide a breakdown of these costs.

**EPCOR Response:** The information is not calculated on the rate class level. EPCOR is assuming a similar revenue to cost structure as the existing Southern Bruce rate structure due to the expected consistent customer profiles.

- (j) Are the full costs in (i) included in the DCF table in the evidence?

**EPCOR Response:** Incremental costs are included in the DCF table.

**Interrogatory # 3.0-ED-24**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) Please provide a table showing the full calculations and assumptions used to generate the revenue forecast from the customer attachment forecast. Please include, among other things, the annual customer attachments, annual customer totals, the use per customer, and the revenue generated per customer.

**EPCOR Response:** Refer to attachment 3-Staff-5.

- (b) If the customer attachment forecast underlying the DCF table differs from the one set out in Exhibit B, Tab 1, Schedule 1, Page 3, please explain and provide a reconciliation table.

**EPCOR Response:** The customer attachment forecast underlying the DCF table does not differ.

- (c) Does EPCOR agree that the number of customer attachments could be impacted by the relative cost-effectiveness of converting to gas versus converting to high-efficiency cold climate air source heat pumps? If not, please explain.

**EPCOR Response:** EPCOR does not have sufficient data to support / or not support this statement.

- (d) Does EPCOR agree that the number of customer attachments could be impacted by customer perceptions of the relative cost-effectiveness of converting to gas versus converting to high-efficiency cold climate air source heat pumps? If not, please explain.

**EPCOR Response:** EPCOR does not have sufficient data to support / or not support this statement.

### Interrogatory # 3.0-ED-25

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

- (a) Please provide EPCOR's best estimate of the relative cost-effectiveness of an average customer in the project area converting to an air-source cold climate heat pump versus gas.<sup>17</sup> Please generate (i) the lifetime difference in total capital costs and operational costs (NPV) based on customer prices over the equipment lifetime and (ii) the difference in average annual operational costs over the equipment lifetime. Please include all material customer-facing costs and benefits, including energy costs, carbon costs, the Greener Homes Grant incentives for heat pumps, and the gains from more efficient summer cooling of an air source heat pump versus a traditional air conditioner. Please provide all calculations and assumptions. Please make assumptions and state caveats as necessary.
- (b) Please re-run the cost comparison spreadsheet underlying (a) with the following assumptions:
  - (i) Customer-facing gas and electricity prices for the project area are based on either: (A) the average price over the past 12 months inflated by 2% annually going forward or (B) the current prices inflated by 2% annually going forward;
  - (ii) A carbon price forecast consistent with the IESO 2050 Pathways to Decarbonization Report, namely: that the carbon price "[c]ontinues rising by \$15/tonne from 2030-2035, and thereafter increases with the rate of inflation."
  - (iii) The installed cost and performance (COP/HSPF & SEER) of the cold climate air source heat pump is based on the Moovair Central heat pumps;<sup>18</sup>
  - (iv) The average SEER of an air conditioner is 13 (per EB-2021-0002, Exhibit I.10h.STAFF77);
  - (v) Two scenarios for water heating: (A) the customer keeps their existing electric water heater and (B) the customer purchases a Rheem hybrid high-efficiency heat pump water heater;
  - (vi) The customer's air conditioner is at 50% of its useful lifetime and its future replacement costs are avoided if the customer installs a heat pump; and
  - (vii) The customer will incur the average Extra Length Charge if they switch to gas.
- (c) For each scenario, please provide the lifetime NPV and the first-year annual operating costs for both options.
- (d) Please provide the live spreadsheets containing these calculations.

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<sup>17</sup> If EPCOR does not have its own tool, it can find one created for Enbridge here: EB-2022-0249, Exhibit I.ED.16, Attachment 7. However, that tool requires proper assumptions to be incorporated, including inclusion of the monthly service charges, etc.

<sup>18</sup> The specs for the Moovair central can be found here: <https://moovair.ca/central-moov-2022/>.

- (e) Please confirm that Moovair is a heat pump developed and sold by The Master Group, which is the largest independent HVAC-R distributor in Canada.<sup>19</sup> [To explain why we suggest using that model as a concrete example.]
- (f) Do the average-use figures assumed in EPCOR's revenue forecast correspond to customers with gas for space heating only or also gas for other uses, such as water heating?

**EPCOR Response** – Average use values in EPCOR's revenue forecast are based on historical consumption in Southern Bruce, so they would reflect a combination of usage types and scenarios, including water heating.

- (g) Please confirm that there are over 430 models of centrally-ducted heat pumps on the Greener Homes Grant eligible equipment list with an HSPF (Region 5) of 10 or higher and that the top-rated Carrier 3-ton units have an HSPF (Region 5) of 11.3.
- (h) Please confirm that there are over 270 models of centrally-ducted heat pumps rated for 30,000 BTUs or higher on the Greener Homes Grant eligible equipment list with an HSPF (Region 5) of 10 or higher.
- (i) Please provide the conversion rate between region 4 and 5 HSPF figures and between HSPF and COP.
- (j) Please provide a table for the duration of the customer attachment horizon with rows for:
  - (i) The number of forecast attachments;
  - (ii) The average capital cost per attachment (e.g. dedicated service line and meter);
  - (iii) The amount of the attachment costs in (ii) covered by rates on average;
  - (iv) The amount of the attachment costs in (ii) covered by the customer on average;
  - (v) The total attachment costs (dedicated service line and meter) for each year; and
  - (vi) A reconciliation of (v) with the incremental capital figures in the DCF table in E-1-1 Attachment 2.

**EPCOR Response:** for (j), please see responses to 3.0-ED-21 Table 1 and 3.0-ED-23(c).

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<sup>19</sup> <https://moovair.ca/why-moovair/>

### Interrogatory # 3.0-ED-26

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Preamble: These questions relate to the probability that some potential customers switch to cold climate heat pumps instead of gas, lowering the number of actual customer attachments. They also related to the probability that customers who do connect later exist the gas system in favour of installing a cold climate heat pump.

Questions:

- (a) For each of the following statements, please confirm if EPCOR agrees with the conclusion. If EPCOR agrees with part but not all of the conclusion, please fully explain and describe with parts EPCOR agrees with. For any parts EPCOR disagrees with, please fully justify the response:
- (i) **Improved cold climate performance:** In the past, heat pumps were inappropriate for our cold winters. Some contractors are not aware that this has changed. Cold climate heat pumps have high performance down to low temperatures (many down to -30°C). Even today, a standard cold climate heat pump can provide 100% of the heat in a Toronto home throughout a typical winter without supplemental heat.<sup>20</sup> But centrally-ducted heat pump units sold today also include a simple and cheap electric coil that fits into the air handler (i.e., blower fan unit) in the basement for supplemental heat for extremely cold days just in case. The technology continues to improve, and the best units have high heating capacities and efficiency levels in the range of 200% even at -30°C.<sup>21</sup>
  - (ii) **Efficiency:** Heat pump efficiency has improved with advancements, such as variable speed compressors, which make them cheaper to operate both for heating and cooling.
  - (iii) **Rebates:** Customers can now receive significant rebates and interest-free loans to purchase a heat pump (see below for details), which were not previously available.
  - (iv) **Carbon price:** By 2030, the carbon price on gas will equal 32.40 cents/m<sup>3</sup>.<sup>22</sup>
- (b) Does EPCOR agree that Natural Resources Canada is a credible and reliable source of information on heat pumps, including heat pump efficiencies?

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<sup>20</sup> Guidehouse Heat Pump Study for Enbridge Gas, p. 10 ([link](#), Ex. K2.2, PDF p. 285); This recent study prepared by Guidehouse for Enbridge shows that a cold climate heat pump can provide 100% of the heating for a Toronto home with a heating load of 2.5 tons. For Toronto homes that are larger or more leaky, supplementary electric resistance heating is forecast to only be required for 1 hour each year. The analysis is based on a standard cold climate heat pump as opposed to a top-of-the-line unit.

<sup>21</sup> EB-2022-0200, Exhibit J18.7 ([link](#)).

<sup>22</sup> Enbridge, *Federal Carbon Charge* ([link](#)).

- (c) Does EPCOR have any reason to disagree with the facts as outlined in “Heating and Cooling With a Heat Pump” by Natural Resources Canada?<sup>23</sup> Please file a copy of this document so it can be referred to on the record with an exhibit number.
- (d) Does EPCOR agree that Abacus Data is a credible and reliable polling firm?
- (e) Does EPCOR have any reason to disagree with the polling data regarding heat pump knowledge and interest in the Abacus Data polling that occurred earlier this year?<sup>24</sup> Please file a copy of this document so it can be referred to on the record with an exhibit number.
- (f) Does EPCOR agree that knowledge of heat pumps is low now and is steadily increasing?

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

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<sup>23</sup> <https://natural-resources.canada.ca/energy-efficiency/energy-star-canada/about/energy-star-announcements/publications/heating-and-cooling-heat-pump/6817>.

<sup>24</sup> <https://environmentaldefence.ca/wp-content/uploads/2023/07/Environmental-Defence-Ontario-Perspectives-Clean-Energy-July-2023.pdf>

### Interrogatory # 3.0-ED-27

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 1

Questions:

- (a) Please provide a table showing the cost of a cold climate heat pump per the US Energy Information Administration's *Buildings Sector Appliance and Equipment Costs and Efficiencies*.<sup>25</sup> Please convert the costs to Canadian dollars.
- (b) Please provide a copy of all studies or reports with details on the installed cost of a cold climate heat pump in Ontario and/or Canada.
- (c) Please provide a copy of and comment on the most up-to-date analysis by the Canadian Climate Institute on the cost-effectiveness of heat pumps.
- (d) Please file a copy of and comment on the following analysis by Ralph Torrie on the heating savings from heat pumps - <https://www.corporateknights.com/issues/2023-06-best-50-issue/calculate-the-savings-from-electrifying-your-home/>.

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

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<sup>25</sup> <https://www.eia.gov/analysis/studies/buildings/equipcosts/>

**Interrogatory # 3.0-ED-28**

Reference: Exhibit E, Tab 1, Schedule 1, Attachment 2

Questions:

- (a) Please confirm that home owners are eligible for up to \$5,000 grants and \$40,000 in interest free loans from the federal government for qualifying cold climate air source heat pump installations.
- (b) Please provide any studies or analysis that EPCOR has completed on the impact of the above-references \$5,000 grant and interest free loans for air source heat pumps on the likely number of customers attaching to the proposed pipeline.
- (c) Please provide any studies or analysis that EPCOR has completed on the impact of current high gas prices on the likely number of customers attaching to the proposed pipeline.

**EPCOR Response:** EPCOR is aware that there are grants available.



### Interrogatory # 3.0-ED-29

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) Please confirm that Canada's 2030 Emissions Reduction Plan includes a projection for carbon emissions associated with buildings to decline by 41% by 2030 from 2019 levels (to 53 CO<sub>2</sub>e from 91 CO<sub>2</sub>e) and that it plans for a 22% reduction by 2026 from 2019 levels (to 71 CO<sub>2</sub>e from 91 CO<sub>2</sub>e).<sup>26</sup> If not, please explain.
- (b) Please confirm that Canada's 2030 Emissions Reduction Plan has formal legal status under s. 9 of the *Canadian Net-Zero Emissions Accountability Act* in relation to the legally binding targets under that *Act*.<sup>27</sup> If not, please explain.
- (c) Please confirm that Canada has committed to net-zero emissions from electricity generation by 2035. If not, please explain.

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

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<sup>26</sup> <https://www.canada.ca/en/environment-climate-change/news/2022/03/2030-emissions-reduction-plan--canadas-next-steps-for-clean-air-and-a-strong-economy.html>

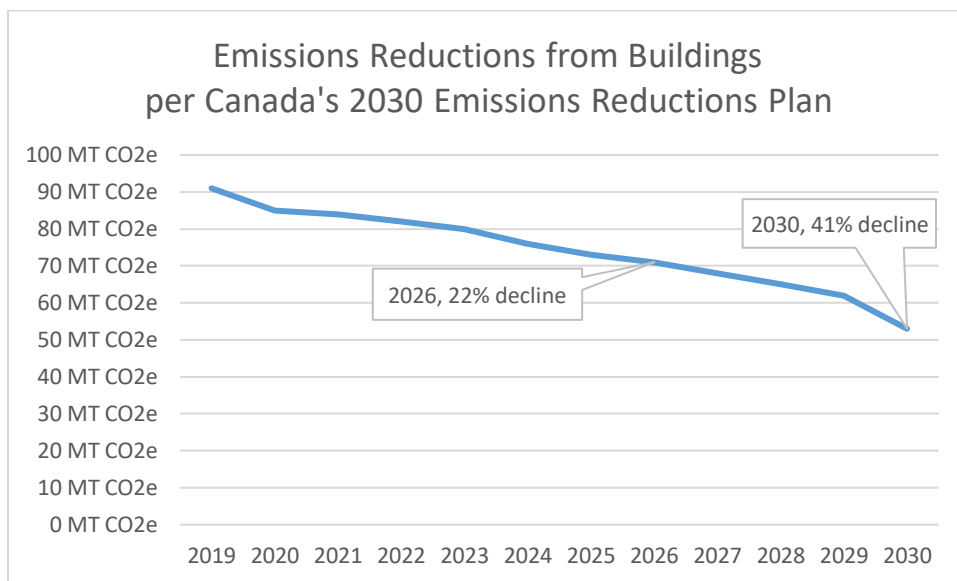
<sup>27</sup> *Canadian Net-Zero Emissions Accountability Act*, s. 9.

### Interrogatory # 3.0-ED-30

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) Please confirm that the following chart accurately depicts a projection of emissions reductions from buildings per Canada's 2030 Emissions Reduction Plan.<sup>28</sup> If not, please prepare a chart that EPCOR believes is accurate:



- (b) Does EPCOR agree that Canada's 2030 Emissions Reduction Plan is likely to impact the customer attachment forecast through future policies that cause some customers to choose electric heat pumps over gas? If not, please explain.

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

<sup>28</sup> For the underlying numbers, see here: *2030 Emissions Reduction Plan – Canada's Next Steps for Clean Air and a Strong Economy* ([link](#)).

### Interrogatory # 3.0-ED-31

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) Please provide a list of grants and loans available to customers in the proposed project area to install cold climate air source heat pumps.
- (b) Please confirm whether each of the following statements is true. If not, please explain why:
  - i. The federal government is now providing \$5,000 incentives for customers to switch to high-efficiency electric heat pumps as part of its Greener Homes Grant;<sup>29</sup>
  - ii. The federal government is now providing an *additional* \$5,000 in incentives for customers to switch from oil to high-efficiency electric heat pumps if they earn a median income or lower (e.g. \$122,000 after-tax income for a family of 4 in Ontario) through the Oil to Heat Pump Affordability Program;<sup>30</sup> and
  - iii. The federal government is now providing up to \$40,000 in interest free loans, which can be put towards conversions to electric heat pumps, and not gas equipment, through the Greener Homes Loan.<sup>31</sup>
- (c) Further to (b)(ii) above, please provide a table showing the median income for Ontario that serves as the eligibility threshold for the Oil to Heat Pump Affordability Program?
- (d) Please provide an estimate of the number and percent of residents in the project area that would be eligible for Oil to Heat Pump Affordability Program. This could be done, for example, based on statistics for the percent households at or below the eligibility threshold in the area or region.
- (e) Please compare the cost of converting from oil to (i) gas versus (ii) an electric cold climate heat pump, accounting for two rebates noted above.

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

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<sup>29</sup> <https://natural-resources.canada.ca/energy-efficiency/homes/canada-greener-homes-initiative/canada-greener-homes-grant/canada-greener-homes-grant/23441>

<sup>30</sup> <https://natural-resources.canada.ca/energy-efficiency/homes/canada-greener-homes-initiative/oil-heat-pump-affordability-program-part-the-canada-greener-homes-initiative/24775>.

<sup>31</sup> <https://natural-resources.canada.ca/energy-efficiency/homes/canada-greener-homes-initiative/canada-greener-homes-loan/24286>

**Interrogatory # 3.0-ED-32**

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) Please confirm how much additional annual subsidy individuals and families qualified under the Ontario Electricity Support Program can receive if they heat their home with electricity?
- (b) Please provide an estimate of the number and percent of residents in the project area that would be eligible for the Ontario Electricity Support Program. This could be done, for example, based on statistics for the percent of households receiving social assistance.

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

### Interrogatory # 3.0-ED-33

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) Does EPCOR agree that government policies or market forces related to decarbonization *could* impact the customer attachment or revenue forecasts? If not, please justify the response.

**EPCOR Response:** Please refer to the preamble at the beginning of this section.

- (b) What are the lifetime volumes of gas (m3) and carbon emissions (CO<sub>2</sub>e) corresponding to the 40-year customer attachment and revenue forecasts in relation only to emissions from end-use combustion?
- (c) What are the lifetime carbon emissions (CO<sub>2</sub>e) corresponding to the 40-year customer attachment and revenue forecasts in relation only to upstream emissions (i.e. extraction and transportation)?
- (d) What are the lifetime carbon emissions (CO<sub>2</sub>e) corresponding to the 40-year customer attachment and revenue forecasts in relation only to unburned methane from customer equipment (i.e. extraction and transportation)?<sup>32</sup>
- (e) What is EPCOR's best estimate of the emissions (gCO<sub>2</sub>e/MJ & tCO<sub>2</sub>e/m3) arising from unburned methane emissions from customer equipment?
- (f) Please confirm that the methane emissions cited in the following reference are only the methane emissions from *combustion*, not from leaks, and if EPCOR disagrees, please explain with excerpts: Ontario Ministry of the Environment and Climate Change. (2017, November). Guideline for Quantification, Reporting and Verification of Greenhouse Gas Emissions. Table 20-3 and Table 20-4. [https://prod-environmental-registry.s3.amazonaws.com/2018-01/013-1457\\_d\\_Guide.pdf](https://prod-environmental-registry.s3.amazonaws.com/2018-01/013-1457_d_Guide.pdf).
- (d) What are the emissions from the combustion of gas in Ontario (gCO<sub>2</sub>e/MJ & tCO<sub>2</sub>e/m3)?

**EPCOR Response:** EPCOR does not prepare the above requested information, and preparing the same in response to ED's request would be onerous and is not reasonably

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<sup>32</sup> Any of the following sources could be used as an emissions factor: Quantifying Methane Emissions from Natural Gas Water Heaters ([link](#)); Unburned Methane Emissions from Residential Natural Gas Appliances ([link](#)); An Estimate of Natural Gas Methane Emissions from California Homes ([link](#)); Beyond-the-Meter: Unaccounted Sources of Methane Emissions in the Natural Gas; Distribution Sector ([link](#)); Methane and NO<sub>x</sub> Emissions from Natural Gas Stoves, Cooktops, and Ovens in Residential Homes ([link](#)).

possible to do within the procedural timeframe established by the OEB for the current proceeding.

Accordingly, project-related lifetime gas volumes and greenhouse gas emissions related to end-use combustion, upstream emissions and un-burned methane emissions cannot reasonably be estimated at this time.

**Interrogatory # 3.0-ED-34**

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) With respect to the revenue generated in the first 10 years, does EPCOR or do ratepayers bear the risk of average use being lower than forecast?

**EPCOR Response:** EPCOR has applied for a Brockton Customer Volume Variance Account ("BCVVA") specific to residential customers in this Application. If approved, this account will address any increase or decrease of residential customer usage over the forecast average of 1,450 m<sup>3</sup>. Such increases or decreases would result in a refund or charge to the customer. The BCVVA applies only to Rate 1 customers. Any volume variances associated with non Rate 1 customers would be at the risk of EPCOR.

Refer also to 3-ED-14.

- (b) With respect to the revenue generated in the final 30 years, does EPCOR or do ratepayers bear the risk of average use being lower than forecast?

**EPCOR Response:** EPCOR has applied for the BCVVA to continue past the initial 10 years. If approved, the impact may be as described above.

Refer also to 3-ED-14.

- (c) Please describe how regulatory adjustments relating to average use interact with the customers attached through community expansions. Please address both the first 10 years and final 30 years.

**EPCOR Response:** EPCOR has no information regarding how regulatory adjustments relating to average use interact with customer attached through community expansions.

### Interrogatory # 3.0-ED-35

Reference: Exhibit E, Tab 1, Schedule 1

Questions:

- (a) Please indicate how much revenue would need to be collected from customers over the final 30 years of this project to cover outstanding capital costs and ongoing O&M costs. Please provide all underlying calculations.

**EPCOR Response:** See below.

	Total (\$000's)
O&M and Overheads	\$ (8,728)
Total Taxes Net of CCA	\$ (4,711)
Depreciation (Net)	\$ (2,841)
<b>Total</b>	<b>\$ (16,280)</b>

The O&M/Overhead and total taxes net of CCA are consistent with the information presented based on the EBO 188 DCF calculations. The depreciation amounts have been projected based on a consistent methodology, but do not appear in the DCF calculations.

- (b) Please complete the following table:

**EPCOR Response:**

Required Revenue per Project Discounted Cash Flow Tables (\$,000)	
SES Revenue	N/A
Distribution Revenue	\$26,970,367
Total Revenue	\$26,970,367
Years 11-40 SES Revenue	N/A
Years 11-40 Distribution Revenue	\$20,634,719
Years 11-40 Revenue	\$20,634,719
Percent of revenue in years 11-40	76.5%



### Interrogatory # 3.0-ED-36

Reference: Exhibit J

Questions:

- (a) Please confirm that Enbridge's average use variance accounts do not protect Enbridge from average use variances in gas expansion areas over the first 10 years of a project due to the OEB-mandated rate stability period. Please explain the answer.

**EPCOR Response:** EPCOR is unclear as to what extent each of Enbridge's average use various variance accounts would / would not protect the utility and rate payers from variances in gas expansion areas over the first 10 years. However, EPCOR has the understanding that Enbridge's NACVA account would protect the utility and rate payers against certain changes in customer's average use<sup>33</sup>. Specific to EPCOR, please see response to 3-ED-34 (a) above.

- (b) Please confirm that EPCOR would not seek disposition of the Customer Volume Variance Account until the first rebasing application following the end of the rate stability period. If that is not confirmed, please explain how that would be consistent with the rate stability period.

**EPCOR Response:** Not Confirmed. It would be consistent with the rate stability period as the revenue requirement during that period is based on an average residential customer usage of 1,450 m<sup>3</sup> per year. The BCVVA will align the annual revenue requirement for residential customers with that annual usage for the initial 10-year period.

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<sup>33</sup> EB-2022-0246 Exhibit J, Tab 1, Schedule 1, page 3 of 5

- (c) If average customer use is lower than forecast, who does EPCOR propose should bear the cost of the revenue shortfall – the existing customer base or EPCOR shareholders? If EPCOR proposes that the existing customer base bear these costs, when would they be included in the revenue requirement? If EPCOR proposes to do that prior to the end of the rate stability period, please explain how that would be allowed.

**EPCOR Response:** Please see response to 3-ED-34 above. The intent is to apply to clear the balances recorded in the BCVVA during the annual IRM application. The application would be brought before the OEB for approval.

**Interrogatory # 3.0-ED-37**

Reference: Exhibit K, Tab 1, Schedule 1, p. 2-3

Preamble:

EPCOR states:

9. EPCOR is forecasting that during the system expansion construction phase of the Project, it will incur additional charges of approximately \$500,000 in order to manage excess soil in compliance with the Regulation and related requirements.

...

12. Without approval of this variance account, the PI for the project is forecast to be 0.90.

Questions:

- (a) Please reproduce and file the DCF tables including the expected increase in soil handling costs.

**EPCOR Response:** These tables were filed in the September 19, 2023 LTC amendment, E\_1\_1\_Attachment 1.

- (b) If the OEB were to rule that the soil handling costs are a normal project cost that must be included in the budget, how would EPCOR proceed? For instance, would it attempt to re-design the project or cancel it entirely?

**EPCOR Response:** Please refer to OEB Staff 3-18-g/h/i.

- (c) Please develop a detailed option for the OEB to consider wherein the soil handling costs are treated as a normal project cost that must be included in the budget. This option would explain how EPCOR could amend its project to bring it back to a profitability index of 1 (if at all)? For instance, how could EPCOR shrink the project further so as to improve the profitability index, similar to the project changes that occurred earlier this year.

**EPCOR Response:** Please refer to OEB Staff 3-18-g/h/i.

**Interrogatory # 5.0-ED-38**

Reference: Exhibit I, Tab 1, Schedule 1

Questions:

- (a) Please provide a route map indicating which portions of the pipeline would be on private or public land.

**EPCOR Response:** Currently the design is completed to a preliminary level. At the current level of design EPCOR is running gas lines in roadways right of way and have not assessed requirements for private property for the Project. Preliminary designs have been provided for reference: ENGLP\_IRR\_5-ED-38\_Preliminary Designs.

- (b) Please provide a map showing the trees that will need to be removed for the pipeline construction.

**EPCOR Response:** Currently the design is completed to a preliminary level. At this stage of the design, we are not aware of any trees that will need to be moved.

- (c) Please provide satellite images of each portion of the pipe with an overlay showing where the trench will be dug for the pipeline. Please provide this as a high-resolution image so that a viewer can zoom in to see the impact on properties and vegetation along each portion of the pipeline route.

**EPCOR Response:** Please refer to 5-ED-38(a) above.

**Interrogatory # 7.0-ED-39**

Reference: Exhibit I, Tab 1, Schedule 1

Questions:

- (a) Would EPCOR agree to the following condition of approval? If not, please explain why not and provide alternative wording for a commitment that EPCOR would make.

“The Applicant shall provide potential customers with a comparison of the average annual energy costs and lifetime all-in costs of converting to gas versus converting to a cold climate air source heat pump.”

**EPCOR Response:** No. The OEB has developed standard conditions that are typically imposed in leave to construct approvals. EPCOR has reviewed these standard conditions and has not identified any additional or revised conditions that it requests be applied to this project.

- (b) Would EPCOR agree to the following condition of approval? If not, please explain why not and provide alternative wording for a commitment that EPCOR would make.

“If the Applicant is providing the public or potential customers with a comparison of annual energy costs with different fuels it shall include an estimate of the average annual energy costs for heating with a cold climate heat pump.”

**EPCOR Response:** No. The OEB has developed standard conditions that are typically imposed in leave to construct approvals. EPCOR has reviewed these standard conditions and has not identified any additional or revised conditions that it requests be applied to this project.

- (c) Please provide a copy of:

- (i) All promotional or informational materials sent to residents of Brockton that discuss the benefits of switching to gas over the past five years;

**EPCOR Response:** No additional information has been distributed beyond those items included in the application.

- (ii) All promotional or informational materials sent to customers in community expansion areas that have connected to the gas system in the past five years, including materials sent by mail, email, or social media;

**EPCOR Response:** As all customers are on e-billing, bills include reference to this page:

<https://www.epcor.com/about/news-announcements/notices/Pages/default.aspx>

This page includes updates on changes in pricing/rates/OEB applications etc.

An exhaustive list of promotional materials is not available and but EPCOR has included a sample of relevant newsletters and updates to the Southern Bruce expansion community as Appendix 7-ED-39 in this document, which provides a representative dataset of the information that is being communicated to customers/potential customers. EPCOR uses a consistent tone and messaging in public communications which is represented by the included content.

- (iii) A copy of all newspaper and online advertisements relating to switching to gas in the past three years; and
- (iv) A copy of all EPCOR website pages relating to switching to gas.

**EPCOR Response:**

<https://www.epcor.com/products-services/natural-gas/Pages/brockton-service.aspx>

- (d) For the items in (b) that are undated, please indicate the date range during which they were sent to customers or published.
- (e) Please provide a copy of all EPCOR communication plans or communication strategy documents relating to community expansions or switching to gas more generally.

**EPCOR Response:** EPCOR's approach to communications on its community expansion projects is developed on a project by project basis by an experienced team of employees. This approach is reflected in materials already filed on the record





# EPCOR SOUTHERN BRUCE NATURAL GAS PROJECT

Construction Update Winter 2020

## PROJECT OVERVIEW

EPCOR Natural Gas Limited Partnership (EPCOR) is proud to be constructing a distribution system that will connect customers to natural gas in the Municipality of Arran-Elderslie, Municipality of Kincardine and Township of Huron-Kinloss.

We look forward to bringing clean, safe and reliable natural gas to the communities of Chesley, Paisley, Inverhuron, Tiverton, Kincardine, Lurgan Beach, Point Clark, Ripley and Lucknow, as well as the Bruce Energy Centre by the end of 2021.

## CONSTRUCTION HIGHLIGHTS

From July to December of 2019, EPCOR, along with its construction partner, AECON, and its environmental consultant, Stantec, installed 57 km of eight inch steel pipeline from Dornoch to the Bruce Energy Centre.

We're pleased to share some of the highlights from Phase 1 of the project:

- Employed 170 workers who logged 150,000 work-hours without any workplace injuries
- Kept to our construction hours and stayed within acceptable noise levels
- Engaged with landowners who had questions about our project
- Carried out a comprehensive Environmental Protection Plan
- Conducted a migratory bird survey to identify nesting areas and avoid tree disruptions
- Used construction techniques to minimize disturbances along wetlands and water course crossings
- Organized environmental awareness training for all field workers to identify species at risk and to prevent the spread of invasive weeds

**Your cooperation as we broke ground on this important project was greatly appreciated. We have a strong commitment to safety and, thanks to your support, this first phase of bringing natural gas to the area was a success.**

## STAY SAFE THIS WINTER

### Take caution at the construction site

Safety is our first priority at EPCOR. That's why we take extra precautions to ensure the safety of our employees and customers. While the pipeline we installed this past summer has been covered, the ground hasn't fully settled. This means there could be soft spots along the road right of ways.

**Be cautious when driving on roadway shoulders as your vehicle could get stuck.**

Please be aware that large boulders, exposed during construction, are along the road shoulders. We have moved the boulders to the tree line and will work to make them more visible, where possible. We care about your safety, so please remember to take caution if snowmobiling along roadway shoulders.

We have posted "soft shoulder" signs along the construction route; however, the signs are spread out along the 57 km route, so please be sure to watch for them while driving.



**We look forward to returning this spring to restore the landscaping that was disturbed as part of the construction process.**

The construction area doesn't need to be fenced in, as winter freezing will help the ground to harden and prevent soft shoulders from being an issue all season. Nevertheless, we urge you to stay off the road shoulders where we were operating.

### Call before you dig

Now that portions of the pipelines are installed, please remember to contact Ontario One Call before starting any excavation to have all underground utilities located.

As a landowner, you have the right to dig on your property, but just sinking a shovel into the ground could cause a disruption for which you could be held liable.

The pipelines we installed are buried one metre below the ground. Although the pipes don't have natural gas flowing through them just yet they can still be damaged during digging or excavation, which could lead to natural gas leaks when they become operational.

Your safety is important. Be sure to contact Ontario One Call at **1-800-400-2255** or **OntarioOneCall.ca** before digging on your property or around the construction site.

## INTERESTED IN NATURAL GAS?

EPCOR has approval to provide natural gas to certain areas in the municipalities of Arran-Elderslie, Kincardine and Huron-Kinloss. However, we will seek approval to serve customers in additional areas should future expansions be warranted. If you would like to register your interest in receiving natural gas, please contact us.

## CONTACT US

Interested in learning more about natural gas?  
Have a question about the project?  
Don't hesitate to contact us.

**Phone: 1-888-765-2256**

**Email: [gas@epcor.com](mailto:gas@epcor.com)**

**Visit: [epcor.com/southernbruce](http://epcor.com/southernbruce)**



The background of the top half of the page is a photograph of a construction site. A large, reddish-brown pipe runs diagonally across the frame. To the right of the pipe, a dirt road is lined with orange traffic cones. In the background, there is a grassy field, a few trees, and a clear blue sky with some clouds.

# EPCOR SOUTHERN BRUCE NATURAL GAS PROJECT

Construction Update Fall 2020  
Gas is Now Flowing!

## PROJECT OVERVIEW

EPCOR is proud to be constructing a distribution system that will connect customers to natural gas in the communities of Chesley, Paisley, Inverhuron, Tiverton, Kincardine, Lurgan Beach, Point Clark, Ripley and Lucknow, as well as the Bruce Energy Centre, by the end of 2021.

## CURRENT CONSTRUCTION ACTIVITY

As of August 4, 2020, natural gas is now flowing underground. While customers in the Municipality of Kincardine will not start gas service until later this fall, the transmission system is live and ready for use.

Now that construction and testing in the area is complete, our crews will be focused on disassembling our work sites and restoring roadways and landscaping.

If your property was disturbed as part of our work, we will restore the area with equivalent materials as close to the original as possible.

Restoration will take place until the construction season ends this year. If conditions become unsuitable sooner than expected, we will return the following spring.

## STAYING SAFE DURING CONSTRUCTION

EPCOR, along with our construction partner, AECON, will continue to work Monday to Friday from 7:00 a.m. to 5:30 p.m.

To help ensure we all continue to stay safe, please:

- Slow down around construction.
- Obey all traffic and lane controls, including flag people.
- Stay outside of barriers and fences.
- Maintain a distance of two metres from our construction crews as per COVID-19 recommendations.
- Keep children and pets a safe distance away from work sites and equipment.

**Thank you for your cooperation,  
support and commitment to safety  
throughout the COVID-19 pandemic  
and this construction season.**

## STAYING SAFE AROUND NATURAL GAS

### Detecting a Natural Gas Leak

While natural gas is one of the safest fuels, small gas leaks can still occur. Knowing how to detect a leak can help reduce the risks to both people and property. These are the signs to look out for:

- **Smell it:** In its pure state, natural gas has no smell or taste. As a safety precaution, we have added a scent called methyl mercaptan, which smells like rotten eggs or Sulphur, so that natural gas leaks can be detected.
- **See it:** Visible signs of a leak include patches of dead vegetation, blowing dust from holes in the ground, bubbles in wet or flooded areas or even flames. In some cases, spotting vapours or ground frosting of white dust can suggest a leak.
- **Hear it:** A hissing or roaring noise along the right-of-way of a pipeline could also indicate a natural gas leak.

## ODOUR ALERT

**We have completed our odour testing in the area. If you smell Sulphur or rotten eggs in the area, please call EPCOR immediately at 1-888-765-2256.**

### Call Before You Dig

As natural gas is now flowing underground, you must call Ontario One Call before you plan any digging or any other actions that disturbs the ground.

A network of power, phone, cable and now natural gas lines, as well as water and sewer pipes may lie just under the surface of your property. Sinking a shovel into the ground could result in serious injury, widespread service disruptions and costly repairs and under Ontario regulations, you could be held liable for all of it.

To arrange to have utility lines located and marked for free, contact **Ontario One Call at 1-800-400-2255 or OntarioOneCall.ca** at least five (5) full business days before you plan to dig.

**We have included a fridge magnet in this package so that you will always have the One Call contact information readily available.**

## INTERESTED IN NATURAL GAS?

EPCOR has approval to provide natural gas to certain areas in the municipalities of Arran-Elderslie, Kincardine and Huron-Kinloss. However, we will seek approval to serve customers in additional areas should future expansions be warranted. If you would like to register your interest in receiving natural gas, please contact us.

## CONTACT US

Interested in learning more about natural gas? Have a question about the project? Don't hesitate to contact us.

**Phone:** 1-888-765-2256

**Email:** [gas@epcor.com](mailto:gas@epcor.com)

**Visit:** [epcor.com/naturalgasconstruction](http://epcor.com/naturalgasconstruction)



The background of the top half of the page is a photograph of a construction site. A large, reddish-brown pipeline runs diagonally across the frame. To the right of the pipeline, a dirt road is lined with orange traffic cones. In the background, there is a grassy field, a few trees, and a clear blue sky with some wispy clouds.

# EPCOR SOUTHERN BRUCE NATURAL GAS PROJECT

Construction Update Fall 2021

## PROJECT OVERVIEW

EPCOR continues to construct its distribution system that will connect customers to natural gas in the communities of Chesley, Paisley, Inverhuron, Tiverton, Kincardine, Lurgan Beach, Point Clark, Ripley and Lucknow, as well as the Bruce Energy Centre, by the end of 2021.

## CURRENT CONSTRUCTION ACTIVITY

From November 11–16, EPCOR will be performing the final tie-in work activities to connect Bruce Power Energy Center to its mainline. Along with the tie-in work, crews will be performing pipeline conditioning activities, which include injection of odorant and flaring, followed by introduction of gas to the regulating station and downstream building appliances. After November 16, long-term odour monitoring and supplemental odorization will continue within the Bruce Power facility for several months, to ensure the gas maintains its minimum odor threshold while the internal wall of the pipe continues to oxidize before reaching a final 'conditioned' state.

## STAYING SAFE DURING CONSTRUCTION

EPCOR, along with our construction partner, AECON, will continue to work Monday to Friday from 7:00 a.m. to 5:30 p.m.

To help ensure we all continue to stay safe, please:

- Slow down around construction.
- Obey all traffic and lane controls, including flag people.
- Stay outside of barriers and fences.
- Maintain a distance of two metres from our construction crews as per COVID-19 recommendations.
- Keep children and pets a safe distance away from work sites and equipment.

**Thank you for your cooperation,  
support and commitment to safety  
throughout the COVID-19 pandemic  
and this construction season.**

## STAYING SAFE AROUND NATURAL GAS

### Detecting a Natural Gas Leak

While natural gas is one of the safest fuels, small gas leaks can still occur. Knowing how to detect a leak can help reduce the risks to both people and property. These are the signs to look out for:

- **Smell it:** In its pure state, natural gas has no smell or taste. As a safety precaution, we have added a scent called methyl mercaptan, which smells like rotten eggs or Sulphur, so that natural gas leaks can be detected.
- **See it:** Visible signs of a leak include patches of dead vegetation, blowing dust from holes in the ground, bubbles in wet or flooded areas or even flames. In some cases, spotting vapours or ground frosting of white dust can suggest a leak.
- **Hear it:** A hissing or roaring noise along the right-of-way of a pipeline could also indicate a natural gas leak.

### ODOUR ALERT

**If you smell Sulphur or rotten eggs  
in the area, please call EPCOR  
immediately at 1-888-765-2256.**

### Call Before You Dig

As natural gas is now flowing underground, you must call Ontario One Call before you plan any digging or any other actions that disturbs the ground.

A network of power, phone, cable and now natural gas lines, as well as water and sewer pipes may lie just under the surface of your property. Sinking a shovel into the ground could result in serious injury, widespread service disruptions and costly repairs and under Ontario regulations, you could be held liable for all of it.

To arrange to have utility lines located and marked for free, contact **Ontario One Call at 1-800-400-2255 or OntarioOneCall.ca** at least five (5) full business days before you plan to dig.

## INTERESTED IN NATURAL GAS?

EPCOR has approval to provide natural gas to certain areas in the municipalities of Arran-Elderslie, Kincardine and Huron-Kinloss. However, we will seek approval to serve customers in additional areas should future expansions be warranted. If you would like to register your interest in receiving natural gas, please contact us.

## CONTACT US

Interested in learning more about natural gas? Have a question about the project? Don't hesitate to contact us.

**Phone:** 1-888-765-2256

**Email:** [gas@epcor.com](mailto:gas@epcor.com)

**Visit:** [epcor.com/naturalgasconstruction](http://epcor.com/naturalgasconstruction)



# CONSTRUCTION NOTICE FOR YOUR AREA

## PROJECT OVERVIEW

**EPCOR is pleased to be bringing natural gas services to the Municipality of Kincardine and parts of Huron-Kinloss—and more specifically to your neighbourhood later this year!**

## CURRENT CONSTRUCTION ACTIVITY

EPCOR, along with our construction partner, AECON, are working tirelessly to complete the distribution system and start natural gas service later this year for customers who have signed up with EPCOR.

We have completed the transmission line outside of town that is the backbone of the system. We have also connected our first industrial clients at the Bruce Energy Centre. This means gas is now present in certain parts of the system and will be flowing underground as we complete the distribution system.

Please take caution when digging on your property by contacting Ontario One Call before starting any work. Additionally, if you smell Sulphur or rotten eggs in your area, please contact EPCOR immediately as it may be a sign of a natural gas leak.

### Completing the Distribution System

We will be working throughout town to continue installing gas pipelines underground. These will make up the distribution system network.

As part of this work, utility companies may spray paint or place flags on or near your property to identify any underground services. Please leave the marks or flags in place to prevent service disruptions or personal injury when our crews begin to work.

### Connecting Homes to the Distribution System

Once we have completed the distribution system, we will be back on your street to connect customers who have signed up for service with EPCOR. At this time, we will be installing the service line that connects the meter at the property to the distribution system so customers can begin using natural gas.

Residents may experience vibrations due to the work we are performing. The levels of noise and vibration used in the construction work on your street and associated with the rest of this project are in accordance with local bylaws and occupational health, safety and environmental standards.

**Important note:** if you have signed up for natural gas service, do not disconnect your existing heating source until the service line has been installed at your property and the appointment for your meter activation has been booked.

## LOOK OUT FOR OUR CREW

**EPCOR gas technicians will be wearing full body Tyvek suits when visiting homes to light appliances prior to service beginning. This is part of our enhanced PPE due to COVID-19.**

## RESTORATION

We will begin restoration of disturbed areas once construction is complete. The sections on both the public and private side that are disturbed as part of our work will be restored with equivalent materials as close to the original as possible.

Restoration will take place until the construction season ends this year. If conditions become unsuitable sooner than expected, we will return the following spring. In addition, we can return one year from restoration to determine if any further restoration is required.





## STAYING SAFE DURING CONSTRUCTION

We will continue to work Monday to Saturday from 7:00 a.m. to 5:30 p.m. To help ensure we all continue to stay safe, please:

- Slow down around construction.
- Obey all traffic and lane controls, including flag people.
- Leave utility flags or marks in place to prevent injury or service disruptions.
- Maintain a distance of two metres from our construction crews as per COVID-19 recommendations.
- Keep children and pets a safe distance away from work sites and equipment.

## STAYING SAFE AROUND NATURAL GAS

**While natural gas has a safety record that's second to none, you must still exercise caution now that gas is in the distribution system underground.**

### Detecting a Natural Gas Leak

Knowing how to detect a leak can help reduce the risks to both people and property. These are the signs to look out for:

- **Smell it:** In its pure state, natural gas has no smell or taste. As a safety precaution, we have added a scent called methyl mercaptan, which smells like rotten eggs or Sulphur, so that natural gas leaks can be detected.
- **See it:** Visible signs of a leak include patches of dead vegetation, blowing dust from holes in the ground, bubbles in wet or flooded areas or even flames. In some cases, spotting vapours or ground frosting of white dust can suggest a leak.
- **Hear it:** A hissing or roaring noise along the right-of-way of a pipeline could also indicate a natural gas leak.

### Call Before You Dig

A network of power, phone, cable—and now natural gas—lines, as well as water and sewer pipes may lie just under the surface of your property. Sinking a shovel into the ground could result in serious injury, widespread service disruptions and costly repairs and under Ontario regulations, you could be held liable for all of it.

Before digging or doing any actions that disturbs the ground, arrange to have utility lines located and marked for free by contacting **Ontario One Call at 1-800-400-2255 or OntarioOneCall.ca.**

## ODOUR ALERT

**If you smell Sulphur or rotten eggs in the area, please call EPCOR immediately at 1-888-765-2256. While rare, this could be a sign of a natural gas leak.**

## CONTACT US

If you have questions about this work or about natural gas, please contact us Monday to Friday, 8 a.m. – 4 p.m.:

**Phone:** 1-888-765-2256

**Email:** gas@epcor.com

**Visit:** epcor.com/naturalgasconstruction



The background image shows a construction site for a natural gas distribution system. Two large, reddish-brown pipes run diagonally across the frame. They are supported by yellow and orange traffic cones. The site is in a rural area with green fields and a few trees under a blue sky with scattered clouds.

# BRINGING NATURAL GAS TO YOUR COMMUNITY

Construction in your area

## NATURAL GAS FOR YOUR COMMUNITY

EPCOR is proud to be constructing a distribution system that will bring safe, affordable and reliable natural gas to the communities of Chesley, Paisley, Inverhuron, Tiverton, Kincardine, Lurgan Beach, Point Clark, Ripley and Lucknow, as well as the Bruce Energy Centre, by the end of 2021.

## SWITCHING TO NATURAL GAS

Natural gas is an abundant fuel source that can add value to your property and save you money. Whether it's for heating, cooking or an endless supply of hot water, natural gas adds convenience, cost savings and reliability to your daily life.

**Residents of Kincardine, Tiverton and Inverhuron can take these steps now to get natural gas service in the fall of 2020:**

- **[See how much you'll save.](#)** Visit our website to calculate how much you could save by switching to natural gas.
- **[Sign up for services.](#)** Now is the time to complete the applications forms by visiting our website or contacting our office.
- **[Contact a local heating \(HVAC\) contractor.](#)** Have your current appliances inspected for conversion to natural gas and discuss other ones you've been considering, such as a gas stove, outdoor gas fire pit or a gas barbeque.

**"Households that use natural gas for space and water heating see an average savings of \$2,000/year compared to homes using propane, electricity or heating oil."\***

## CONSTRUCTION ACTIVITY

Along with our construction partner, AECON, and our environmental consultant, Stantec, we will be working throughout the construction season on the service network that will bring natural gas to your property. You will find us:

- Completing the backbone of the system, from Dornoch to the Bruce Energy Centre, that will transport gas to each of the communities.
- Installing the distribution networks to directly serve homes, farms, businesses and organizations this year.

**Construction will begin in Kincardine in May, in Inverhuron in July and in Tiverton in September.**





## WHAT TO EXPECT DURING CONSTRUCTION

Our hours of work will be Monday to Friday from 7:00 a.m. to 5:30 p.m. Occasional evening or Saturday work may be required.

### COVID-19 MEASURES

The health and safety of our customers and staff is our top priority. Due to the heightened attention related to COVID-19, we need the public to maintain a distance of two metres at all times.

**Traffic Disruptions:** You may experience traffic delays as we anticipate temporarily closing a lane of traffic on the side of the road where crews are working. In some cases, we may need to close portions of the road for a 24-hour period and reroute traffic temporarily. In case of emergency, AECON is able to provide immediate access to any property or road.

We will follow Ontario traffic control standards, clearly mark any traffic disruptions and accommodations and provide advance notification where possible.

**Odour monitoring:** Natural gas is inherently odourless. As a safety precaution, a scent called methyl mercaptan is added to natural gas. This odour smells like rotten eggs or Sulphur so that natural gas can be quickly detected.

Once the first phase of our project is energized (expected summer 2020), we will conduct odour monitoring for a three-week period. During this time, you may notice occasional odours from the pipeline. The odour is temporary and not harmful.

**Safety:** is a responsibility we all share and EPCOR's top priority. We will maintain our work areas in a safe and secure manner, and perform our work according to all local bylaws and occupational health, safety and environmental requirements.

**To help ensure we all stay safe during construction, please:**

- Slow down around construction.
- Obey all traffic and lane controls, including flag people.
- Stay outside of barriers and fences.
- Maintain a distance of two metres from our construction crews as per COVID-19 recommendations.
- Keep children and pets a safe distance away from work sites and equipment.

## TRUSTING YOUR SERVICE PROVIDER

EPCOR is a Canadian-based company with more than 125 years of utility experience. We provide electricity, natural gas and water services to approximately 2 million people in Canada and the U.S.

**We're proud to have been recognized for leadership in environment and social responsibility, and providing a healthy, safe and rewarding work environment for our 3,400 employees.**

## FIND OUT MORE

Interested in learning more about natural gas? Have a question about the project? Don't hesitate to contact us.

**Phone:** 1-888-765-2256

**Email:** [gas@epcor.com](mailto:gas@epcor.com)

**Visit:** [epcor.com/southernbruce](http://epcor.com/southernbruce)

\*Source: 2019 Canadian Gas Association Playbook