

**Schedule O**  
**Enbridge Gas Community Expansion Project Proposal**  
**Georgian Bluffs**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Georgian Bluffs Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the Township of Georgian Bluffs within Grey County.

The proposed facilities will provide access to natural gas to a forecasted 92 customers (88 residential, 3 commercial / institutional and 1 industrial).

The proposed tie-in point will be near intersection of \_\_\_\_\_ and \_\_\_\_\_ connecting to an existing 4" polyethylene pipeline. The proposed distribution pipeline will consist of 6,130 m of 2" polyethylene pipe and 1,540 m of 4" polyethylene pipe. The proposed distribution system will extend north via \_\_\_\_\_ to \_\_\_\_\_ up to \_\_\_\_\_ and will extend along \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and continuing through \_\_\_\_\_ up to \_\_\_\_\_ near \_\_\_\_\_.

There will be no reinforcement required to accommodate additional loads for the system. No new stations or any station modifications required.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	6,130

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	1,540

Please refer to Schedule O1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule O2, Table 3.2.



3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule O2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule O3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule O4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule O5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule O6 for Enbridge's CPCN for the Township of Georgian Bluffs (RP-2004-0191 / EB-2004-0381) that covers the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule O2, Table 4.2.</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule O2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$2,974,796</p> <p>Please refer to Schedule O2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$32,335</p> <p>Please refer to Schedule O2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$9.67</p> <p>Please refer to Schedule O2, Table 5.3.</p>

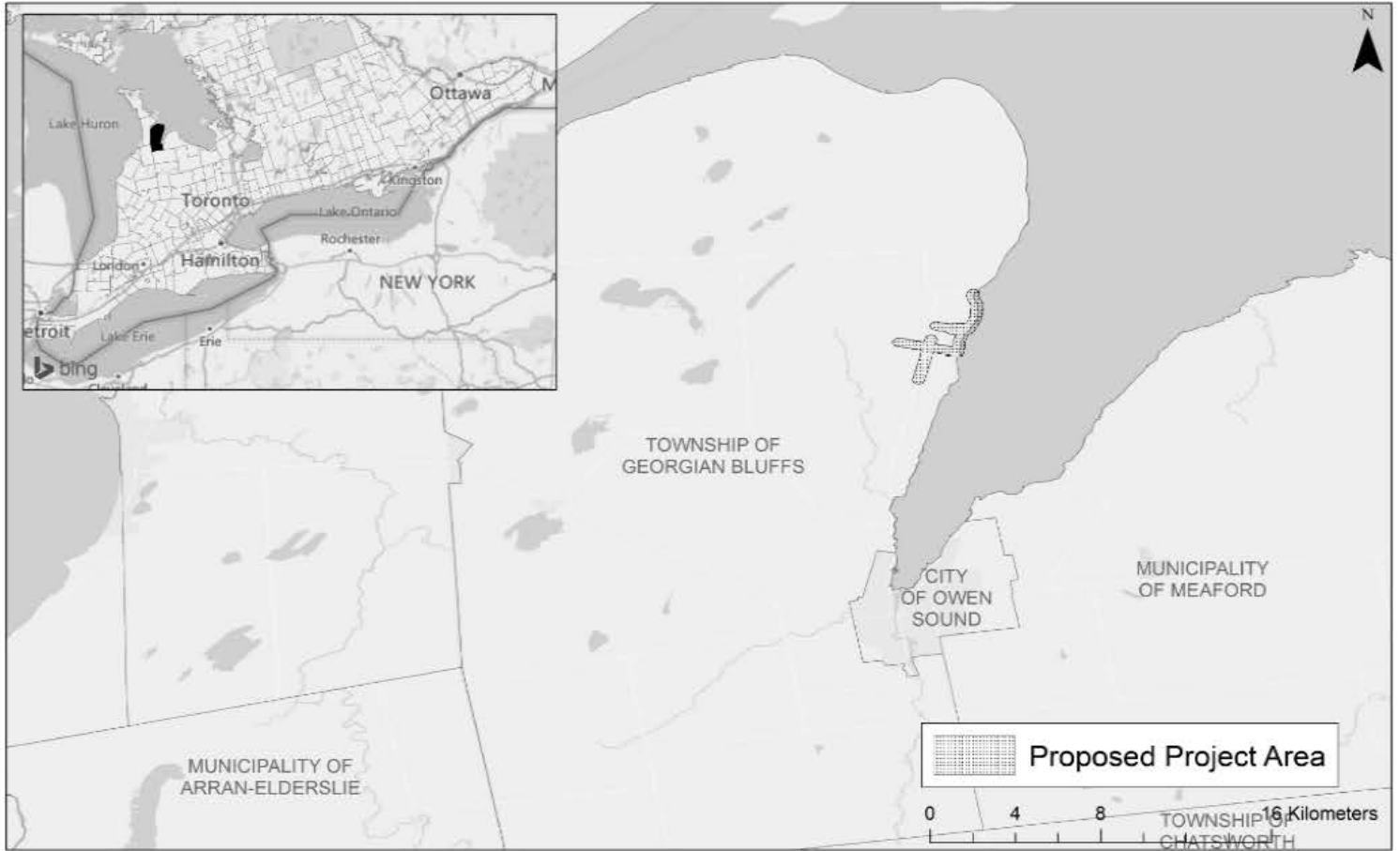
<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule O2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule O2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule O2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> <li>• System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB’s <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule O4.</p>

**Schedule O1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Georgian Bluffs**

## Georgian Bluffs



**Schedule O2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Georgian Bluffs**



Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>
Residential	Firm
Commercial	Firm
Institutional	Firm
Agricultural	Firm
Industrial	Firm
Total Customers	
Cumulative Customers	

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	26	20	13	7	7	3	3	3	3	3	88
	-	2	-	-	-	-	-	-	-	-	2
	-	-	-	-	-	-	-	-	-	-	-
	-	1	-	-	-	-	-	-	-	-	1
	-	1	-	-	-	-	-	-	-	-	1
	<u>26</u>	<u>24</u>	<u>13</u>	<u>7</u>	<u>7</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>92</u>
	26	50	63	70	77	80	83	86	89	92	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>	<u>Annual Volumes - m3</u>										<u>Total</u>
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	28,600	79,200	115,500	137,500	152,900	163,900	170,500	177,100	183,700	190,300	1,399,200
Commercial	-	3,600	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	61,200
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	85,000
Industrial	-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
Total Volumes	<u>28,600</u>	<u>137,800</u>	<u>232,700</u>	<u>254,700</u>	<u>270,100</u>	<u>281,100</u>	<u>287,700</u>	<u>294,300</u>	<u>300,900</u>	<u>307,500</u>	<u>2,395,400</u>

<u>Customer Type</u>	<u>Cumulative Volumes - m3</u>										
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	28,600	107,800	223,300	360,800	513,700	677,600	848,100	1,025,200	1,208,900	1,399,200	
Commercial	-	3,600	10,800	18,000	25,200	32,400	39,600	46,800	54,000	61,200	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000	
Industrial	-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000	
Total Volumes	<u>28,600</u>	<u>166,400</u>	<u>399,100</u>	<u>653,800</u>	<u>923,900</u>	<u>1,205,000</u>	<u>1,492,700</u>	<u>1,787,000</u>	<u>2,087,900</u>	<u>2,395,400</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

Total Capital Costs	<u>Year 10</u>

Table 4.3 - Revenue Requirement Over The Rate Stability Period

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Revenue Requirement											

Closing Rate Base (net of proposed Section 36.2 funding)	<u>Year 10</u>

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 2,974,796
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Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<a href="#">Year 10</a> \$ 32,335
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Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Year 10 Volume (m3)	<a href="#">Year 10</a> \$ 9.67
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Table 6.1 - Distribution Charge

	<a href="#">Project Year</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">9</a>	<a href="#">10</a>	<a href="#">Total</a>
Distribution Revenue	\$	4,246	14,176	21,983	25,249	27,536	29,169	30,149	31,129	32,109	33,089	\$ 248,834
SES Revenue		6,578	31,694	53,521	58,581	62,123	64,653	66,171	67,689	69,207	70,725	550,942
Total Distribution Charge	\$	<u>10,824</u>	<u>45,870</u>	<u>75,504</u>	<u>83,830</u>	<u>89,659</u>	<u>93,822</u>	<u>96,320</u>	<u>98,818</u>	<u>101,316</u>	<u>103,814</u>	<u>\$ 799,776</u>

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	<u>Net Present Value</u>
<u>Cash Inflow</u>	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
<u>Cash Outflow</u>	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	<u>1.00</u>

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	<u>Net Present Value</u>	
<u>Cash Inflow</u>		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule O3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Georgian Bluffs**

Section 3.4 Georgian Bluffs

Total Forecasted Customers 92 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Oil	19	21%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 30,351	6.7	-2.5	129	(49)
Electricity F/A	8	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 6,379	0.5	3.6	4	30
Electricity Baseboard	11	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 4,062	0.5	3.6	6	40
Propane	40	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 14,893	5.2	-1.1	210	(43)
Wood	8	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	5	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	92	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 55,685	12.9	3.6	349	(22)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate M1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2200	Gas (incl. fixed)	\$/m3	0.572
Heating oil	L	2433	Heating oil	\$/L	1.163
Electricity	kWh	18046	Electricity	\$/kWh	0.112
Propane	L	3359	Propane	\$/L	0.484

Notes:

Gas prices correspond to EGI (Union Gas South) April 2020 rates, including 23 cents per m3 SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

South Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 1 (March 2020).

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule O4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Georgian Bluffs**

## Georgian Bluffs Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule O5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Georgian Bluffs**





## The Corporation of the Township of Georgian Bluffs

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April 16, 2020

Enbridge Gas Inc.  
Att: Murray Costello, Director, Southeast Region Operations  
603 Kumpf Drive  
Waterloo, ON N2J 4A4

Dear Mr. Costello,

### **Re: Expression of Support for Natural Gas Expansion to Georgian Bluffs Township**

On behalf of Township of Georgian Bluffs I would like to formally express our interest to have the [REDACTED] area included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Sincerely,

A handwritten signature in black ink, appearing to read "DK Burley", with a stylized flourish at the end.

Mayor Dwight Burley  
Township of Georgian Bluffs  
[dburley@georgianbluffs.ca](mailto:dburley@georgianbluffs.ca)  
519-376-2729

**Schedule O6**  
**Enbridge Gas Community Expansion Project Proposal**  
**Georgian Bluffs**



**RP-2004-0191**

**EB-2004-0381**

## **Certificate of Public Convenience and Necessity**

The Ontario Energy Board hereby grants

**Union Gas Limited**

approval under section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55, to construct works to supply gas to the

**Township of Georgian Bluffs.**

This certificate replaces the certificates of the former municipalities that are now within the Township of Georgian Bluffs.

**DATED** at Toronto, July 27, 2004.

ONTARIO ENERGY BOARD

Peter H. O'Dell  
Acting Board Secretary

**Schedule P**  
**Enbridge Gas Community Expansion Project Proposal**  
**\_\_\_\_\_ (South Glengarry)**

**Enbridge Gas Inc.  
Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: _____ (South Glengarry) Community Expansion Project	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve \_\_\_\_\_ within the Township of South Glengarry.

The proposed facilities will provide access to natural gas to a forecasted 77 customers (71 residential, 4 commercial / institutional and 2 industrial).

The project proposes to tie-in to an existing NPS 2 SC HP system with NPS 4 ST HP to run \_\_\_\_\_ for approximately \_\_\_\_\_ to cross \_\_\_\_\_. A station is proposed to cut the high pressure to HP polyethylene pipe for the distribution system in \_\_\_\_\_. From the proposed station, the proposed NPS 2 pipeline runs \_\_\_\_\_ for \_\_\_\_\_ to reach the distribution system within \_\_\_\_\_ which includes approximately 4.4 km of polyethylene pipe.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
SC	4	950

The approximate length and size of the distribution pipeline required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	5,600

Please refer to Schedule P1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule P2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule P2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule P3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule P4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule P5.</p>



3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule P6 for Enbridge's CPCN for the Township of South Glengarry (EB-2007-0957) that covers the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule P2, Table 4.2</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule P2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$2,352,112</p> <p>Please refer to Schedule P2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$30,547</p> <p>Please refer to Schedule P2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$6.10</p> <p>Please refer to Schedule P2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule P2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule P2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule P2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule P4.</p>

**Schedule P1**  
**Enbridge Gas Community Expansion Project Proposal**  
**\_\_\_\_\_ (South Glengarry)**

# South Glengarry



**Schedule P2**  
**Enbridge Gas Community Expansion Project Proposal**  
**\_\_\_\_\_ (South Glengarry)**

Table 3.2 - Customer Attachments Over The Rate Stability Period

Customer Type	Firm / IT	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total
Residential	Firm		19	17	6	5	4	4	4	4	4	4	71
Commercial	Firm		-	4	-	-	-	-	-	-	-	-	4
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	-	-	-	-	-	-	-	-	-	-
Industrial	Firm		-	2	-	-	-	-	-	-	-	-	2
Total Customers			<u>19</u>	<u>23</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>77</u>
Cumulative Customers			19	42	48	53	57	61	65	69	73	77	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

Customer Type	Project Year	Annual Volumes - m3										Total
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential		22,800	66,000	93,600	106,800	117,600	127,200	136,800	146,400	156,000	165,600	1,138,800
Commercial		-	9,900	19,800	19,800	19,800	19,800	19,800	19,800	19,800	19,800	168,300
Institutional		-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	-	-	-	-	-	-	-	-	-	-
Industrial		-	100,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,700,000
Total Volumes		<u>22,800</u>	<u>175,900</u>	<u>313,400</u>	<u>326,600</u>	<u>337,400</u>	<u>347,000</u>	<u>356,600</u>	<u>366,200</u>	<u>375,800</u>	<u>385,400</u>	<u>3,007,100</u>

Customer Type	Project Year	Cumulative Volumes - m3									
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Residential		22,800	88,800	182,400	289,200	406,800	534,000	670,800	817,200	973,200	1,138,800
Commercial		-	9,900	29,700	49,500	69,300	89,100	108,900	128,700	148,500	168,300
Institutional		-	-	-	-	-	-	-	-	-	-
Agricultural		-	-	-	-	-	-	-	-	-	-
Industrial		-	100,000	300,000	500,000	700,000	900,000	1,100,000	1,300,000	1,500,000	1,700,000
Total Volumes		<u>22,800</u>	<u>198,700</u>	<u>512,100</u>	<u>838,700</u>	<u>1,176,100</u>	<u>1,523,100</u>	<u>1,879,700</u>	<u>2,245,900</u>	<u>2,621,700</u>	<u>3,007,100</u>

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

	<u>Year 10</u>
Total Capital Costs	

Table 4.3 - Revenue Requirement Over The Rate Stability Period

	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total
Revenue Requirement												

	<u>Year 10</u>
Closing Rate Base (net of proposed Section 36.2 funding)	



Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$2,352,112

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$30,547

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$6.10

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	3,995	19,060	31,391	33,704	35,596	37,278	38,960	40,643	42,325	44,007	\$326,959
SES Revenue		5,244	40,457	72,082	75,118	77,602	79,810	82,018	84,226	86,434	88,642	691,633
Total Distribution Charge	\$	9,239	59,517	103,473	108,822	113,198	117,088	120,978	124,869	128,759	132,649	\$1,018,592

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	1.00

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Without Section 36.2 Funding (C / D)	

**Schedule P3**  
**Enbridge Gas Community Expansion Project Proposal**  
**\_\_\_\_\_ (South Glengarry)**

Section 3.4 \_\_\_\_\_ (South Glengarry)

Total Forecasted Customers 77 Penetration Rate 46%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	2	3%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 3,358	7.2	-2.7	15	(6)
Electricity F/A	21	28%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 15,110	0.6	3.9	12	84
Electricity Baseboard	14	18%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 9,822	0.6	3.9	8	54
Propane	29	38%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 8,181	5.6	-1.1	161	(31)
Wood	10	13%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	1	1%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	77	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 36,470	13.9	4.1	197	101

<sup>1</sup> Based on completed Market Research for this community. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2400	Gas (incl. fixed)	\$/m3	0.617
Heating oil	L	2623	Heating oil	\$/L	1.163
Electricity	kWh	19460	Electricity	\$/kWh	0.112
Propane	L	3622	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (EGD) April 2020 rates, including 23 cents per m<sup>3</sup> SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 4 (March 2020)

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule P4**  
**Enbridge Gas Community Expansion Project Proposal**  
**\_\_\_\_\_ (South Glengarry)**

## \_\_\_\_\_ (South Glengarry) Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule P5**  
**Enbridge Gas Community Expansion Project Proposal**  
**\_\_\_\_\_ (South Glengarry)**



## Township of South Glengarry

6 Oak Street, P.O. Box 220, Lancaster, ON, K0C 1N0

T: (613) 347-1166 | F: (613) 347-3411

[www.southglengarry.com](http://www.southglengarry.com)

April 27, 2020

EB-2019-0255

Schedule P5

Redacted

Enbridge Gas Inc.  
Attn: Mr. Ian Ross  
Director – Eastern Region Operations  
400 Coventry Road  
Ottawa, ON, K1K 2C7

Dear Mr. Ian Ross,

### Re: Expression of Support for Natural Gas Expansion to the Township of South Glengarry

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of the Township of South Glengarry, I would like to formally express our interest to have the [REDACTED] on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Please contact Joanne Haley, General Manager - Community Services if you require further information on the project area. Joanne can be reached via email at [jhaley@southglengarry.com](mailto:jhaley@southglengarry.com). The Township of South Glengarry looks forward to working with Enbridge to expand natural gas in our community.

Sincerely,

Frank Prevost, Mayor  
Township of South Glengarry



**Schedule P6**  
**Enbridge Gas Community Expansion Project Proposal**  
**\_\_\_\_\_ (South Glengarry)**

**EB-2007-0957**

## **Certificate of Public Convenience and Necessity**

The Ontario Energy Board hereby grants

### **Enbridge Gas Distribution Inc.**

approval under section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55, as amended, to construct works to supply gas to the

### **Township of South Glengarry**

This certificate replaces the certificates or portions of certificates associated with the former entities that are now within the Township of South Glengarry

**DATED** at Toronto, March 13, 2008

ONTARIO ENERGY BOARD

*Original signed by*

Neil McKay  
Manager, Facilities Applications

**Schedule Q**  
**Enbridge Gas Community Expansion Project Proposal**  
**Latchford**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Latchford Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i>
<i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the Town of Latchford in Timiskaming District. The proposed facilities will provide access to natural gas to a forecasted 122 customers (107 residential, 13 commercial / institutional and 2 industrial).

The proposed tie-in point will be approximately \_\_\_\_\_ of Latchford along \_\_\_\_\_ connecting to an existing TC Energy pipeline. The proposed distribution pipeline will consist of 15,357 m of 2" polyethylene pipe and 1,218 m of 4" polyethylene pipe. The proposed distribution system will extend \_\_\_\_ via \_\_\_\_\_ to Latchford to include \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and other surrounding areas.

This is an independent system with no reinforcement required to accommodate additional loads for the system. A new TC Energy station is required to be installed.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	15,357

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	1,218

Please refer to Schedule Q1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule Q2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule Q2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule Q3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule Q4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule Q5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Enbridge Gas does not currently have a franchise agreement in place with the Town of Latchford nor does it hold a Certificate of Public Convenience and Necessity for the Town of Latchford. Enbridge Gas does have franchise agreements and Certificates of Public Convenience and Necessity for municipalities adjacent to the Town of Latchford including the Town of Cobalt, the Municipality of Temagami and the City of Temiskaming Shores.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule Q2, Table 4.2.</p>



4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule Q2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$6,970,298</p> <p>Please refer to Schedule Q2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$57,134</p> <p>Please refer to Schedule Q2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$14.53</p> <p>Please refer to Schedule Q2, Table 5.3.</p>

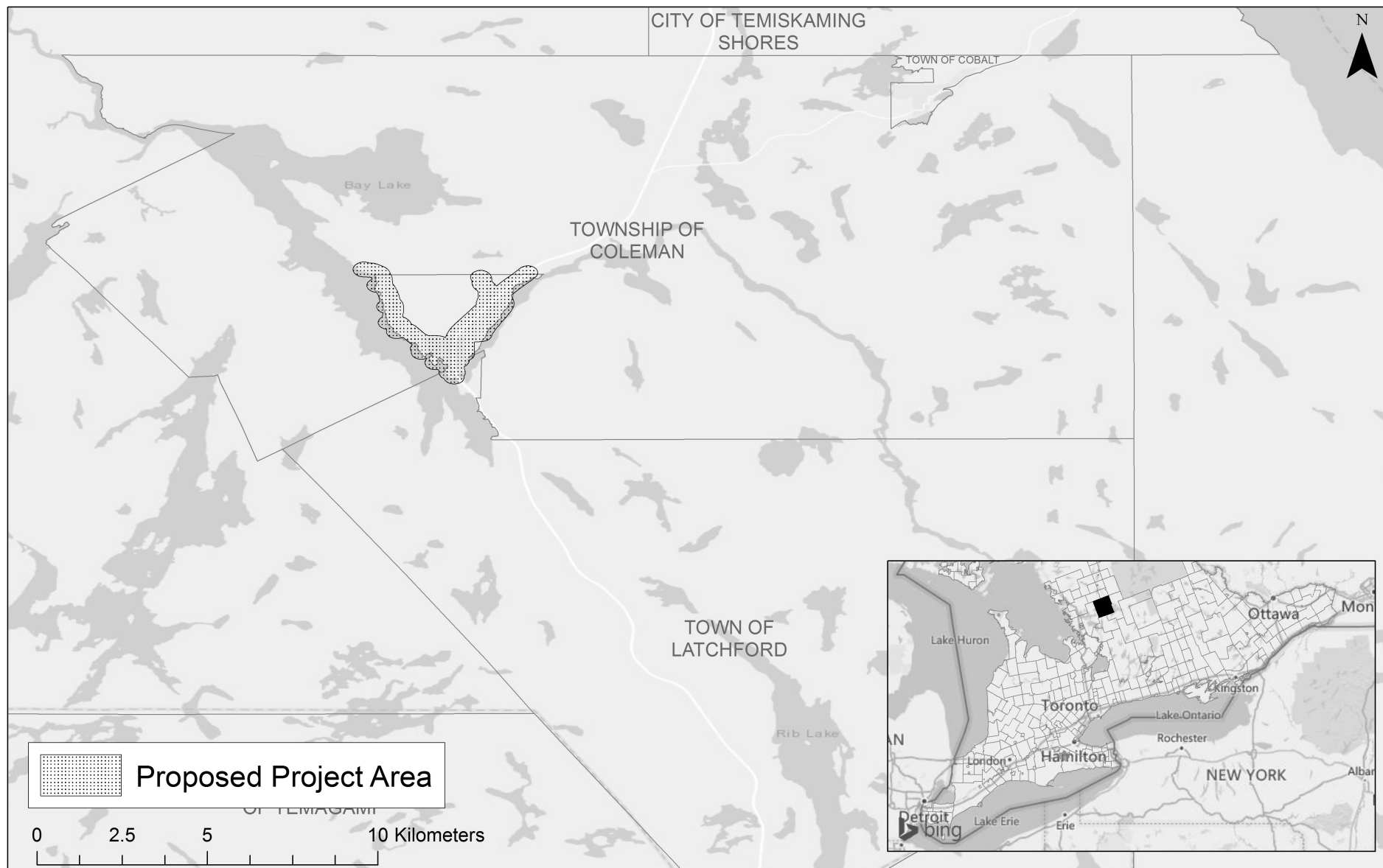
<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule Q2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule Q2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule Q2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> <li>• Franchise Agreement</li> <li>• Certificate of Public Convenience and Necessity</li> <li>• System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule Q4.</p>

**Schedule Q1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Latchford**

# Latchford



**Schedule Q2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Latchford**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>
Residential	Firm
Commercial	Firm
Institutional	Firm
Agricultural	Firm
Industrial	Firm
Total Customers	
Cumulative Customers	

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	34	25	17	8	8	3	3	3	3	3	107
	-	9	2	1	1	-	-	-	-	-	13
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	2	-	-	-	-	-	-	-	-	2
	<u>34</u>	<u>36</u>	<u>19</u>	<u>9</u>	<u>9</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>122</u>
	34	70	89	98	107	110	113	116	119	122	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>	<u>Annual Volumes - m3</u>										<u>Total</u>
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	37,400	102,300	148,500	176,000	193,600	205,700	212,300	218,900	225,500	232,100	1,752,300
Commercial	-	18,000	39,600	44,300	46,500	47,600	47,600	47,600	47,600	47,600	386,400
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	-	-	-	-	-	-	-	-	-	-
Industrial	-	100,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,700,000
Total Volumes	<u>37,400</u>	<u>220,300</u>	<u>388,100</u>	<u>420,300</u>	<u>440,100</u>	<u>453,300</u>	<u>459,900</u>	<u>466,500</u>	<u>473,100</u>	<u>479,700</u>	<u>3,838,700</u>

<u>Customer Type</u>	<u>Cumulative Volumes - m3</u>										
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	37,400	139,700	288,200	464,200	657,800	863,500	1,075,800	1,294,700	1,520,200	1,752,300	
Commercial	-	18,000	57,600	101,900	148,400	196,000	243,600	291,200	338,800	386,400	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	-	-	-	-	-	-	-	-	-	
Industrial	-	100,000	300,000	500,000	700,000	900,000	1,100,000	1,300,000	1,500,000	1,700,000	
Total Volumes	<u>37,400</u>	<u>257,700</u>	<u>645,800</u>	<u>1,066,100</u>	<u>1,506,200</u>	<u>1,959,500</u>	<u>2,419,400</u>	<u>2,885,900</u>	<u>3,359,000</u>	<u>3,838,700</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

Total Capital Costs	<u>Year 10</u>

Table 4.3 - Revenue Requirement Over The Rate Stability Period

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Revenue Requirement											

Closing Rate Base (net of proposed Section 36.2 funding)	<u>Year 10</u>

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 6,970,298
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Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<a href="#">Year 10</a> \$ 57,134
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Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Year 10 Volume (m3)	<a href="#">Year 10</a> \$ 14.53
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Table 6.1 - Distribution Charge

	<a href="#">Project Year</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">9</a>	<a href="#">10</a>	<a href="#">Total</a>
Distribution Revenue	\$	7,877	31,974	52,721	59,331	63,501	66,281	67,671	69,061	70,451	71,841	\$ 560,710
SES Revenue		8,602	50,669	89,263	96,669	101,223	104,259	105,777	107,295	108,813	110,331	882,901
Total Distribution Charge	\$	<u>16,479</u>	<u>82,643</u>	<u>141,984</u>	<u>156,000</u>	<u>164,724</u>	<u>170,540</u>	<u>173,448</u>	<u>176,356</u>	<u>179,264</u>	<u>182,172</u>	<u>\$ 1,443,611</u>

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

<u>Cash Inflow</u>	<u>Net Present Value</u>	
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Proposed Section 36.2 Funding		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)		<u>1.00</u>



Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value	
Cash Inflow		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
Cash Outflow		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule Q3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Latchford**

Section 3.4 Latchford

Total Forecasted Customers 122 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Oil	26	21%	\$ 5,000	\$ 2,787	\$ 1,460	\$ 1,328	\$ 34,016	6.6	-2.4	168	(62)
Electricity F/A	11	9%	\$ 5,000	\$ 1,998	\$ 1,460	\$ 538	\$ 5,913	0.5	3.6	6	39
Electricity Baseboard	15	12%	\$ 12,000	\$ 1,998	\$ 1,460	\$ 538	\$ 7,884	0.5	3.6	8	53
Propane	54	44%	\$ 600	\$ 1,611	\$ 1,460	\$ 152	\$ 8,154	5.1	-1.0	274	(53)
Wood	11	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	6	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	122	100%	\$ 31,100	\$ 8,395	\$ 5,838	\$ 2,557	\$ 55,966	12.7	3.8	456	(23)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 01 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2200	Gas (incl. fixed)	\$/m3	0.663
Heating oil	L	2397	Heating oil	\$/L	1.163
Electricity	kWh	17778	Electricity	\$/kWh	0.112
Propane	L	3309	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (Union Gas North West) April 2020 rates, including 23 cents per m3 SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices are currently unavailable for the Union North Rate zones.

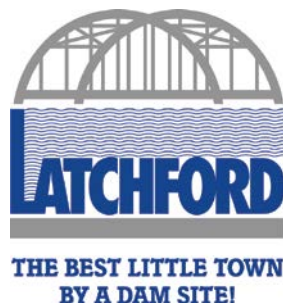
Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule Q4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Latchford**

## Latchford Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule Q5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Latchford**



The Corporation of The Town of Latchford  
10 Main St., Hwy 11, P.O. Box 10  
Latchford, Ontario P0J 1N0  
TEL (705) 676-2416 FAX (705) 676-2121

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February 28, 2020

Attention: Luke Skaarup,  
Director, Northern Region Operations  
Enbridge Gas Inc

Dear Mr Skaarup,

Re: Expression of Support for Natural Gas Expansion to the **Latchford Natural Gas Project**

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that is not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of Town of Latchford, I would like to formally express our interest to have the **Latchford Natural Gas Project** included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from The Town of Latchford, as applicable, demonstrated through a written expression of support which we are prepared to undertake by waiving municipal taxes on your infrastructure for a period of 20 years as was committed to in June of 2017.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs through the development of our business/industrial Park and lower monthly costs for our residents.

Sincerely,

A handwritten signature in black ink, appearing to read 'George L. Lefebvre', with a stylized flourish at the end.

George L. Lefebvre;

Mayor  
Town of Latchford  
[glefebvre@latchford.ca](mailto:glefebvre@latchford.ca)  
705-676-2416  
705-648-8298

cc: Wendy Landry  
Penny Stefura



**Schedule R**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mansfield**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Mansfield Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the community of Mansfield within the Township of Mulmur in Dufferin County. The proposed facilities will provide access to natural gas to a forecasted 243 customers (237 residential and 6 commercial / institutional).

The nearest existing gas infrastructure is on \_\_\_\_\_ in Adjala-Tosorontio. A station is proposed to tie-in to the existing high-pressure system in \_\_\_\_\_ and reduce pressure to intermediate for the supply line and distribution to Mansfield. The proposed supply line is approximately 8 km and runs west along \_\_\_\_\_ into Mansfield to the distribution system. The distribution system within Mansfield includes approximately 16 km of polyethylene pipe.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	8,000

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	11,770
Polyethylene	4	4,000

Please refer to Schedule R1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule R2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule R2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule R3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule R4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule R5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule R6 for Enbridge's CPCN for the Township of Mulmur (EBC 48) that covers the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule R2, Table 4.2.</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule R2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$9,047,094</p> <p>Please refer to Schedule R2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$37,231</p> <p>Please refer to Schedule R2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$15.76</p> <p>Please refer to Schedule R2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule R2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule R2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule R2, Table 7.2.</p>



<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule R4.</p>

**Schedule R1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mansfield**

# Mansfield



**Schedule R2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mansfield**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Residential	Firm		64	57	21	15	12	15	13	15	13	12	237
Commercial	Firm		-	4	-	-	-	-	-	-	-	-	4
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	2	-	-	-	-	-	-	-	-	2
Industrial	Firm		-	-	-	-	-	-	-	-	-	-	-
Total Customers			<u>64</u>	<u>63</u>	<u>21</u>	<u>15</u>	<u>12</u>	<u>15</u>	<u>13</u>	<u>15</u>	<u>13</u>	<u>12</u>	<u>243</u>
Cumulative Customers			64	127	148	163	175	190	203	218	231	243	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Annual Volumes - m3</u>						<u>10</u>	<u>Total</u>
Residential		76,800	222,000	315,600	358,800	391,200	423,600	457,200	490,800	524,400	554,400	3,814,800	
Commercial		-	9,900	19,800	19,800	19,800	19,800	19,800	19,800	19,800	19,800	168,300	
Institutional		-	-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	-	-	-	-	-	-	-	-	-	-	-
Industrial		-	-	-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>76,800</u>	<u>231,900</u>	<u>335,400</u>	<u>378,600</u>	<u>411,000</u>	<u>443,400</u>	<u>477,000</u>	<u>510,600</u>	<u>544,200</u>	<u>574,200</u>	<u>3,983,100</u>	

<u>Customer Type</u>	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Cumulative Volumes - m3</u>						<u>10</u>	
Residential		76,800	298,800	614,400	973,200	1,364,400	1,788,000	2,245,200	2,736,000	3,260,400	3,814,800		
Commercial		-	9,900	29,700	49,500	69,300	89,100	108,900	128,700	148,500	168,300		
Institutional		-	-	-	-	-	-	-	-	-	-		
Agricultural		-	-	-	-	-	-	-	-	-	-		
Industrial		-	-	-	-	-	-	-	-	-	-		
Total Volumes		<u>76,800</u>	<u>308,700</u>	<u>644,100</u>	<u>1,022,700</u>	<u>1,433,700</u>	<u>1,877,100</u>	<u>2,354,100</u>	<u>2,864,700</u>	<u>3,408,900</u>	<u>3,983,100</u>		

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

	<u>Year 10</u>
Total Capital Costs	

Table 4.3 - Revenue Requirement Over The Rate Stability Period

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Revenue Requirement											

	<u>Year 10</u>
Closing Rate Base (net of proposed Section 36.2 funding)	

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$9,047,094

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$37,231

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$15.76

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	13,457	42,386	62,274	69,844	75,521	81,198	87,086	92,974	98,861	104,118	\$727,720
SES Revenue		17,664	53,889	78,246	88,182	95,634	103,086	110,814	118,542	126,270	133,170	925,497
Total Distribution Charge	\$	31,121	96,275	140,520	158,026	171,155	184,284	197,900	211,516	225,131	237,288	\$1,653,217

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	1.00

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Without Section 36.2 Funding (C / D)	

**Schedule R3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mansfield**



Section 3.4 Mansfield

Total Forecasted Customers 243 Penetration Rate 78%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	49	20%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 76,290	7.2	-2.7	349	(130)
Electricity F/A	39	16%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 27,467	0.6	3.9	23	152
Electricity Baseboard	39	16%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 27,467	0.6	3.9	23	152
Propane	90	37%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 25,474	5.6	-1.1	502	(98)
Wood	27	11%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	0	0%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	243	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 156,697	13.9	4.1	896	76

<sup>1</sup> Based on completed Market Research for this community. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2400	Gas (incl. fixed)	\$/m3	0.617
Heating oil	L	2623	Heating oil	\$/L	1.163
Electricity	kWh	19460	Electricity	\$/kWh	0.112
Propane	L	3622	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (EGD) April 2020 rates, including 23 cents per m<sup>3</sup> SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 4 (March 2020)

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule R4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mansfield**

## Mansfield Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule R5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mansfield**



February 2020

Dear *REGIONAL DIRECTOR*,

**Re: Expression of Support for Natural Gas Expansion to The Township of Mulmur**

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of Mulmur, I would like to formally express our interest to have The Township of Mulmur included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

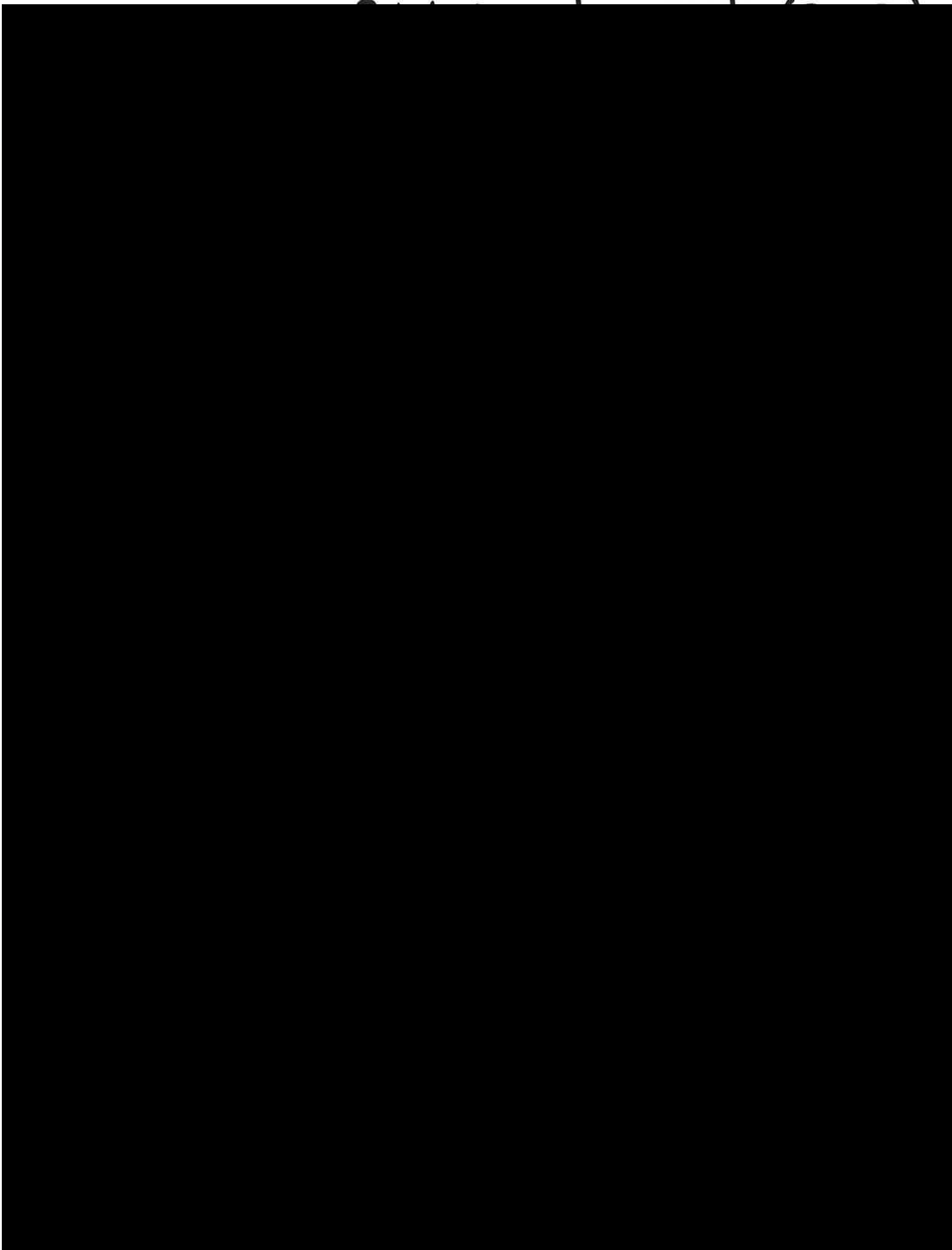
Sincerely,

A blue ink signature of Tracey Atkinson, consisting of a stylized 'T' followed by a horizontal line.

Tracey Atkinson  
CAO/Planner  
Township of Mulmur  
[tatkinson@mulmur.ca](mailto:tatkinson@mulmur.ca)  
705-466-3341 x222

A blue ink signature of Janet Horner, written in a cursive style.

Janet Horner  
Mayor  
Township of Mulmur  
[jhorner@mulmur.ca](mailto:jhorner@mulmur.ca)



The first of these is the fact that the system is not a simple one. It is a complex system, and as such, it is not possible to understand it by looking at its parts in isolation. The system is a whole, and its behavior is determined by the interactions between its parts. This is a fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The second of these is the fact that the system is dynamic. It is not a static system, and its behavior changes over time. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The third of these is the fact that the system is open. It is not a closed system, and it interacts with its environment. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The fourth of these is the fact that the system is self-organizing. It is not a system that is controlled from the outside, and it is not a system that is designed from the top down. It is a system that organizes itself, and its behavior emerges from the interactions between its parts. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The fifth of these is the fact that the system is resilient. It is not a system that is fragile, and it is not a system that is easily disrupted. It is a system that is able to withstand change, and it is able to adapt to new circumstances. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The sixth of these is the fact that the system is sustainable. It is not a system that is unsustainable, and it is not a system that is doomed to failure. It is a system that is able to continue to exist, and it is able to thrive in the face of change. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The seventh of these is the fact that the system is equitable. It is not a system that is unfair, and it is not a system that is biased. It is a system that is able to provide for the needs of all its members, and it is able to ensure that everyone has a fair chance of success. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The eighth of these is the fact that the system is transparent. It is not a system that is opaque, and it is not a system that is hidden. It is a system that is able to be understood, and it is able to be communicated. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The ninth of these is the fact that the system is accountable. It is not a system that is irresponsible, and it is not a system that is unaccountable. It is a system that is able to be held responsible, and it is able to be held accountable for its actions. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

The tenth of these is the fact that the system is inclusive. It is not a system that is exclusive, and it is not a system that is discriminatory. It is a system that is able to include everyone, and it is able to ensure that everyone has a voice. This is another fundamental principle of systems thinking, and it is one that is often overlooked in traditional approaches to problem-solving.

**Schedule R6**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mansfield**



THE ONTARIO ENERGY BOARD

IN THE MATTER of The Municipal Franchises Act, R.S.O. 1960, Chapter 255 and amendments thereto;

AND IN THE MATTER of an application by The Consumers' Gas Company for a certificate of public convenience and necessity to construct works and to supply natural gas to the Township of Mulmur, in the County of Dufferin.

B E F O R E:

A.R. Crozier, Chairman } Friday, the 10th  
A.B. Jackson, Vice Chairman } day of June, 1966.

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

UPON the Application of The Consumers' Gas Company (hereinafter called the Applicant) for a certificate pursuant to the provisions of The Municipal Franchises Act, R.S.O. 1960, Chapter 255 and amendments thereto and upon the hearing of such Application by the Board at the City of Toronto, on the 10th day of June, 1966, after due notice had been given as directed by the Board, in the presence of Counsel for the Applicant no one else appearing, upon consideration of the evidence and exhibits produced at the hearing and upon hearing what was alleged by Counsel for the Applicant

1. THIS BOARD DOETH ORDER that a Certificate of Public Convenience and Necessity be and the same is hereby granted to The Consumers' Gas Company for the supply of natural gas to the inhabitants of the Township of Mulmur and for the construction of the works necessary therefor.
2. This Board fixes the costs of this Application at \$25.00 payable forthwith by the Applicant.

DATED AT TORONTO this 13th day of July, A.D. 1966.

THE ONTARIO ENERGY BOARD

  
Board Secretary, Pro Tempore

**Schedule S**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mattawa**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Town of Mattawa Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve \_\_\_\_\_ in the Town of Mattawa. The proposed pipeline system will provide natural gas to a forecasted 22 residential customers. The proposed tie-in point for the distribution pipeline system will connect to an existing 2" steel pipeline \_\_\_\_\_. The proposed distribution system will connect via \_\_\_\_\_ and be installed through to the intersection of \_\_\_\_\_ and \_\_\_\_\_. There will be no reinforcement required to accommodate additional loads. A new station is proposed to accommodate additional loads.

The approximate length and size of the distribution pipeline system required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	1,900

Please refer to Schedule S1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule S2, Table 3.2.

3.3

**Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.**

**For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.**

Please refer to Schedule S2, Table 3.3.

3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule S3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule S4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule S5.</p>
3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule S6 for Enbridge's CPCN for the Town of Mattawa (EBC 125) that covers the entire area of the proposed project.</p>

Part IV – Cost of Project															
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>														
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</p> <p>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</p> <p>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility’s proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent’s project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</p> <p>Please refer to Schedule S2, Table 4.2.</p>														
4.3	<p><b>Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&amp;A costs) and rate base amount at the end of year ten.</b></p> <p><b>Complete the tables below:</b></p> <p><b>Revenue Requirement</b></p> <table><tr><td>Description</td><td>Year 1</td><td>Year 2...</td><td>Year 10</td><td>Total</td></tr><tr><td>Revenue Requirement</td><td></td><td></td><td></td><td></td></tr></table> <table><tr><td>Description</td><td>Year 10</td></tr><tr><td>Closing Rate Base</td><td></td></tr></table> <p>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</p> <p>Please refer to Schedule S2, Table 4.3.</p>	Description	Year 1	Year 2...	Year 10	Total	Revenue Requirement					Description	Year 10	Closing Rate Base	
Description	Year 1	Year 2...	Year 10	Total											
Revenue Requirement															
Description	Year 10														
Closing Rate Base															

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$1,034,567</p> <p>Please refer to Schedule S2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$47,026</p> <p>Please refer to Schedule S2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$21.87</p> <p>Please refer to Schedule S2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule S2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>



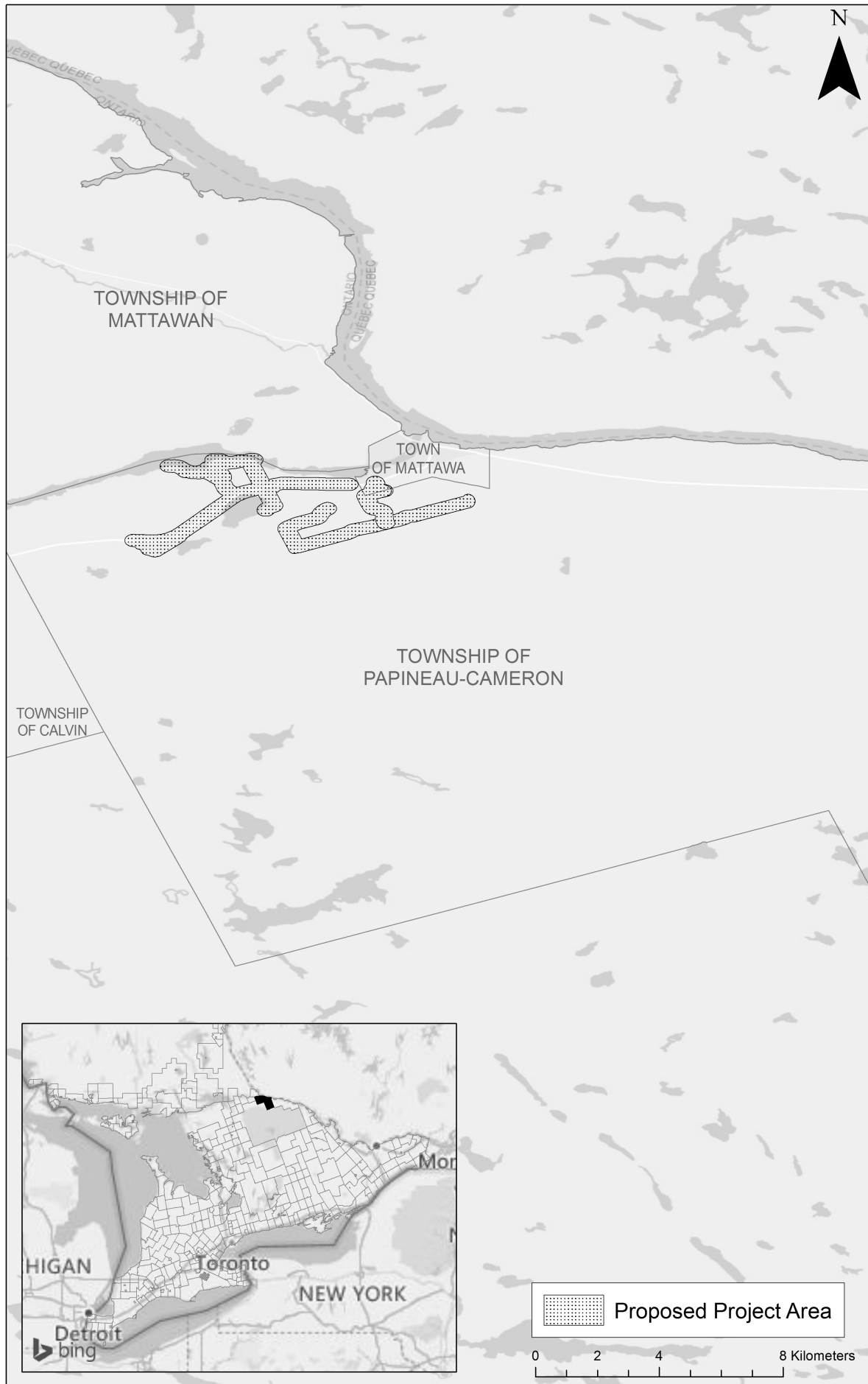
<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule S2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule S2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> <li>• System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB’s <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule S4.</p>

**Schedule S1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mattawa**

# Town of Mattawa

EB-2019-0255  
Schedule S1  
Redacted



**Schedule S2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mattawa**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>
Residential	Firm
Commercial	Firm
Institutional	Firm
Agricultural	Firm
Industrial	Firm
Total Customers	
Cumulative Customers	

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	7	4	2	2	2	1	1	1	1	1	22
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	7	4	2	2	2	1	1	1	1	1	22
	7	11	13	15	17	18	19	20	21	22	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

<u>Annual Volumes - m3</u>											
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	7,700	19,800	26,400	30,800	35,200	38,500	40,700	42,900	45,100	47,300	334,400
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	<u>7,700</u>	<u>19,800</u>	<u>26,400</u>	<u>30,800</u>	<u>35,200</u>	<u>38,500</u>	<u>40,700</u>	<u>42,900</u>	<u>45,100</u>	<u>47,300</u>	<u>334,400</u>

<u>Customer Type</u>
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

<u>Cumulative Volumes - m3</u>											
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
	7,700	27,500	53,900	84,700	119,900	158,400	199,100	242,000	287,100	334,400	
	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-
	<u>7,700</u>	<u>27,500</u>	<u>53,900</u>	<u>84,700</u>	<u>119,900</u>	<u>158,400</u>	<u>199,100</u>	<u>242,000</u>	<u>287,100</u>	<u>334,400</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

Total Capital Costs
---------------------

<u>Year 10</u>

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Revenue Requirement
---------------------

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>

Closing Rate Base (net of proposed Section 36.2 funding)
--

<u>Year 10</u>

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 1,034,567
--	--------------

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<u>Year 10</u> \$ 47,026
---	-----------------------------

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Year 10 Volume (m3)	<u>Year 10</u> \$ 21.87
---	----------------------------

Table 6.1 - Distribution Charge

	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Distribution Revenue	\$	1,622	4,170	5,560	6,487	7,413	8,108	8,572	9,035	9,498	9,961	\$ 70,425
SES Revenue		1,771	4,554	6,072	7,084	8,096	8,855	9,361	9,867	10,373	10,879	76,912
Total Distribution Charge	\$	<u>3,393</u>	<u>8,724</u>	<u>11,632</u>	<u>13,571</u>	<u>15,509</u>	<u>16,963</u>	<u>17,933</u>	<u>18,902</u>	<u>19,871</u>	<u>20,840</u>	<u>\$ 147,337</u>

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

<u>Cash Inflow</u>	<u>Net Present Value</u>	
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Proposed Section 36.2 Funding		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)		<u>1.00</u>

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	<u>Net Present Value</u>	
<u>Cash Inflow</u>		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule S3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mattawa**



Section 3.4 Mattawa

Total Forecasted Customers 22 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Oil	5	21%	\$ 5,000	\$ 2,787	\$ 1,460	\$ 1,328	\$ 6,134	6.6	-2.4	30	(11)
Electricity F/A	2	9%	\$ 5,000	\$ 1,998	\$ 1,460	\$ 538	\$ 1,066	0.5	3.6	1	7
Electricity Baseboard	3	12%	\$ 12,000	\$ 1,998	\$ 1,460	\$ 538	\$ 1,422	0.5	3.6	1	9
Propane	10	44%	\$ 600	\$ 1,611	\$ 1,460	\$ 152	\$ 1,470	5.1	-1.0	49	(10)
Wood	2	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	1	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	22	100%	\$ 31,100	\$ 8,395	\$ 5,838	\$ 2,557	\$ 10,092	12.7	3.8	82	(4)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 01 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2200	Gas (incl. fixed)	\$/m3	0.663
Heating oil	L	2397	Heating oil	\$/L	1.163
Electricity	kWh	17778	Electricity	\$/kWh	0.112
Propane	L	3309	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (Union Gas North West) April 2020 rates, including 23 cents per m3 SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices are currently unavailable for the Union North Rate zones.

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule S4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mattawa**

## Town of Mattawa Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule S5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mattawa**



# Corporation of the Town of Mattawa

☎ (705) 744-5611 • 📠 (705) 744-0104

160 Water Street — P.O. Box 390

MATTAWA, ONTARIO P0H 1V0

✉ info@mattawa.ca

EB-2019-0255  
Schedule S5  
Redacted

March 06, 2020

Dear Luke Skaarup

Director, Northern Region Operations

Enbridge Gas Inc.

**Re: Expression of Support for Natural Gas Expansion to [REDACTED]  
[REDACTED] Mattawa**

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of the Corporation of the Town of Mattawa, I would like to formally express our interest to have [REDACTED] included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through written expression of support and/or a commitment to financial support in its project submissions.

Natural Gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Sincerely,

Raymond Belanger  
CAO/Treasurer

**Schedule S6**  
**Enbridge Gas Community Expansion Project Proposal**  
**Mattawa**



IN THE MATTER OF the Municipal Franchises Act, R.S.O. 1980, Chapter 309;

AND IN THE MATTER OF an Application by Northern and Central Gas Corporation Limited for a Certificate of Public Convenience and Necessity to construct works and to supply gas to the inhabitants of the Town of Mattawa in the District of Nipissing.

BEFORE:	I. C. MacNabb	)	
	Vice Chairman and	)	
	Presiding Member	)	
		)	
	S. J. Wychowanec, Q.C.	)	June 15, 1983
	Vice Chairman	)	
		)	
	J. C. Butler	)	
	Member	)	

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

UPON the application of Northern and Central Gas Corporation Limited ("Northern"), dated April 4, 1983, for a Certificate of Public Convenience and Necessity to construct works and to supply gas in the Town of Mattawa;

AND UPON the application having been heard at Toronto on June 15, 1983, in the presence of counsel for Northern and for the Board, no one else appearing, and the Board having delivered oral Reasons for Decision on June 21, 1983:

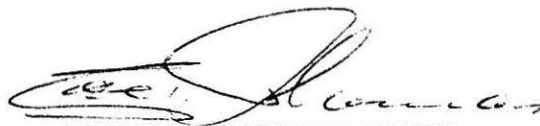
- 2 -

THE BOARD ORDERS THAT:

1. A Certificate of Public Convenience and Necessity is hereby granted to Northern to construct works to supply and to supply gas in the Town of Mattawa.
2. The Board's costs shall be paid by Northern as soon as these have been fixed.

ISSUED at Toronto this *5TH* day of *JULY*, 1983.

ONTARIO ENERGY BOARD

A handwritten signature in dark ink, appearing to read 'S.A.C. Thomas', is written over a horizontal line.

S.A.C. Thomas  
Board Secretary



**Schedule T**  
**Enbridge Gas Community Expansion Project Proposal**  
**Maxville**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Maxville Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the community of Maxville located in the Township of North Glengarry, southeast of Ottawa.

The proposed facilities will provide access to natural gas to a forecasted 325 customers (275 residential, 49 commercial / institutional and 1 industrial).

The project proposes to tie-in to existing NPS 6 steel XHP system at the intersection of \_\_\_\_\_ and \_\_\_\_\_ with a proposed XHP to HPPE station. From the proposed station, the lateral feed runs west for approximately 16 km along \_\_\_\_\_ and \_\_\_\_\_ to the proposed distribution system within Maxville.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	6	16,200

The approximate length and size of the distribution pipeline required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	8,000
Polyethylene	4	5,000

Please refer to Schedule T1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule T2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule T2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule T3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule T4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule T5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule T6 for Enbridge's CPCN for the Township of North Glengarry (EB-2006-0333) that covers the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule T2, Table 4.2.</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule T2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$12,526,564</p> <p>Please refer to Schedule T2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$38,543</p> <p>Please refer to Schedule T2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$11.66</p> <p>Please refer to Schedule T2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule T2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

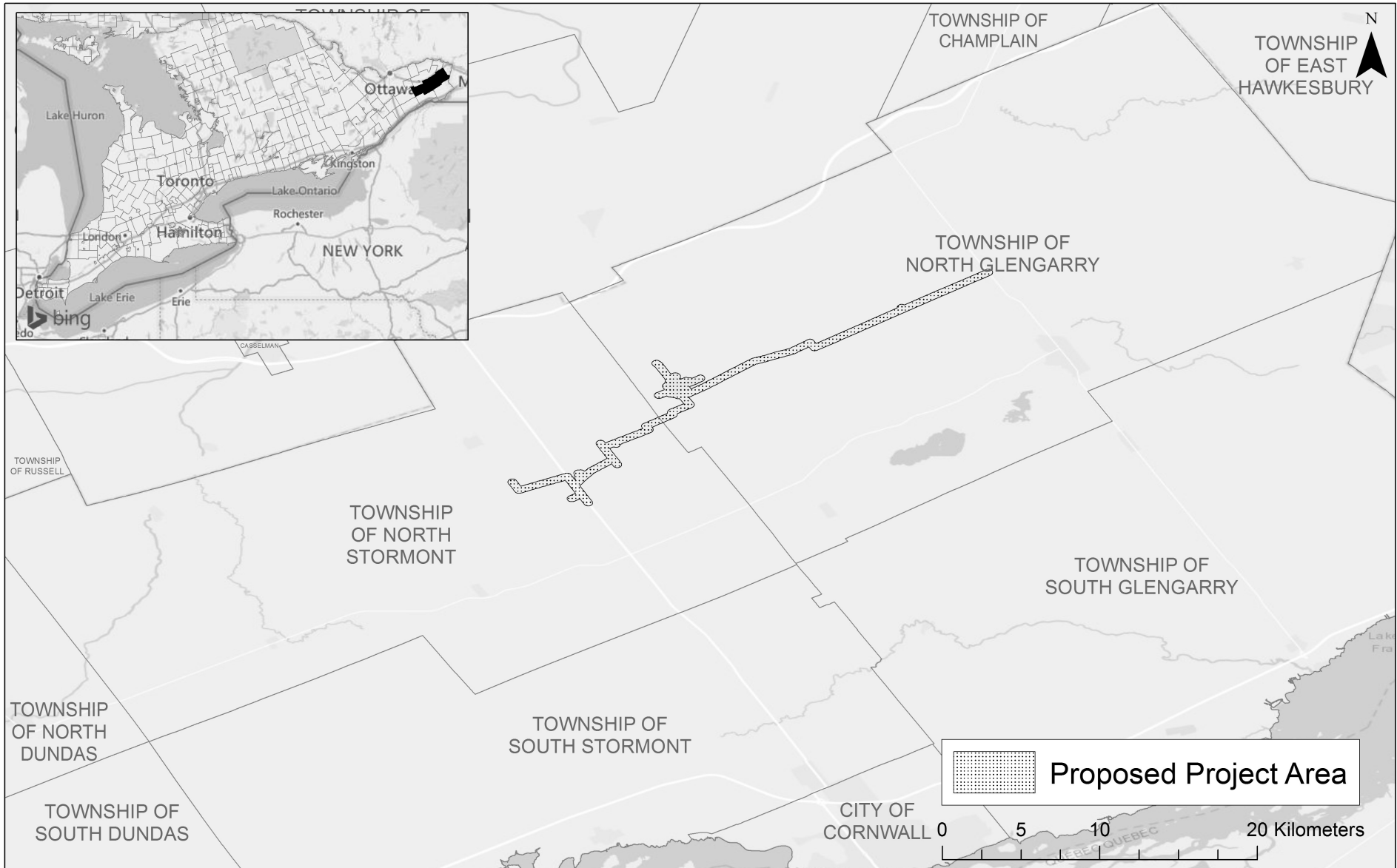
<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule T2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule T2, Table 7.2.</p>



<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule T4.</p>

**Schedule T1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Maxville**

# Maxville



**Schedule T2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Maxville**

Table 3.2 - Customer Attachments Over The Rate Stability Period

Customer Type	Firm / IT	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total
Residential	Firm		75	66	26	18	13	17	14	17	15	14	275
Commercial	Firm		-	24	9	4	3	1	1	1	1	1	45
Institutional	Firm		-	1	-	-	-	-	-	-	-	-	1
Agricultural	Firm		-	3	-	-	-	-	-	-	-	-	3
Industrial	Firm		-	1	-	-	-	-	-	-	-	-	1
Total Customers			<u>75</u>	<u>95</u>	<u>35</u>	<u>22</u>	<u>16</u>	<u>18</u>	<u>15</u>	<u>18</u>	<u>16</u>	<u>15</u>	<u>325</u>
Cumulative Customers			75	170	205	227	243	261	276	294	310	325	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

Customer Type	Project Year	Annual Volumes - m3										Total
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential		88,739	255,836	364,554	416,093	452,872	488,872	526,072	563,272	601,672	636,472	4,394,453
Commercial		-	46,700	114,400	145,300	160,100	166,200	168,600	171,000	173,400	175,800	1,321,500
Institutional		-	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	425,000
Agricultural		-	56,200	112,400	112,400	112,400	112,400	112,400	112,400	112,400	112,400	955,400
Industrial		-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
Total Volumes		<u>88,739</u>	<u>433,736</u>	<u>741,354</u>	<u>823,793</u>	<u>875,372</u>	<u>917,472</u>	<u>957,072</u>	<u>996,672</u>	<u>1,037,472</u>	<u>1,074,672</u>	<u>7,946,353</u>

Customer Type	Project Year	Cumulative Volumes - m3									
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Residential		88,739	344,575	709,129	1,125,221	1,578,093	2,066,965	2,593,037	3,156,309	3,757,981	4,394,453
Commercial		-	46,700	161,100	306,400	466,500	632,700	801,300	972,300	1,145,700	1,321,500
Institutional		-	25,000	75,000	125,000	175,000	225,000	275,000	325,000	375,000	425,000
Agricultural		-	56,200	168,600	281,000	393,400	505,800	618,200	730,600	843,000	955,400
Industrial		-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000
Total Volumes		<u>88,739</u>	<u>522,475</u>	<u>1,263,829</u>	<u>2,087,621</u>	<u>2,962,993</u>	<u>3,880,465</u>	<u>4,837,537</u>	<u>5,834,209</u>	<u>6,871,681</u>	<u>7,946,353</u>

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

	<u>Year 10</u>
Total Capital Costs	

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Revenue Requirement	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total

	<u>Year 10</u>
Closing Rate Base (net of proposed Section 36.2 funding)	

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$12,526,564

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$38,543

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$11.66

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	15,683	66,952	113,341	130,335	140,926	149,428	156,998	164,568	172,349	179,498	\$1,290,079
SES Revenue		20,410	99,759	170,511	189,472	201,336	211,019	220,127	229,235	238,619	247,175	1,827,661
Total Distribution Charge	\$	36,093	166,711	283,853	319,807	342,262	360,447	377,125	393,803	410,967	426,673	\$3,117,740

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	1.00

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	<u>Net Present Value</u>	
<u>Cash Inflow</u>		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule T3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Maxville**



Section 3.4 Maxville

Total Forecasted Customers 325 Penetration Rate 65%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	68	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 107,135	7.2	-2.7	490	(183)
Electricity F/A	29	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 20,664	0.6	3.9	17	115
Electricity Baseboard	39	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 27,552	0.6	3.9	23	153
Propane	143	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 40,516	5.6	-1.1	799	(156)
Wood	29	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	16	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	325	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 195,866	13.9	4.1	1,328	(71)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2400	Gas (incl. fixed)	\$/m3	0.617
Heating oil	L	2623	Heating oil	\$/L	1.163
Electricity	kWh	19460	Electricity	\$/kWh	0.112
Propane	L	3622	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (EGD) April 2020 rates, including 23 cents per m<sup>3</sup> SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices correspond to the latest available monthly average EDPRO residential rates for Zone 4 (March 2020)

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule T4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Maxville**

## Maxville Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule T5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Maxville**



Corporation of the Township of North Glengarry  
Municipalité du canton de Glengarry nord  
90 rue Main Street S.  
P.O. /C.P. 700  
Alexandria ON K0C 1A0  
Tel: (613) 525-1110  
Fax: (613) 525-1649  
[www.northglengarry.ca](http://www.northglengarry.ca)

February 27, 2020.

Dear Ian Ross,

Re: Expression of Support for Natural Gas Expansion to the Township of North Glengarry.

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of the Township of North Glengarry, I would like to formally express our interest to have the Maxville Natural Gas Expansion Project included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Sincerely,

Jamie MacDonald

Mayor

Township of North Glengarry

[jamiemacdonald@northglengarry.ca](mailto:jamiemacdonald@northglengarry.ca)

(613) 551-8691

**Schedule T6**  
**Enbridge Gas Community Expansion Project Proposal**  
**Maxville**

**EB-2006-0333**

## **Certificate of Public Convenience and Necessity**

The Ontario Energy Board hereby grants

**Enbridge Gas Distribution Inc.**

approval under section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55, as amended, to construct works to supply gas to the

**Township of North Glengarry**

This certificate replaces the certificates of the former townships that are now within the Township of North Glengarry.

**DATED** at Toronto, March 23, 2007

ONTARIO ENERGY BOARD

*Original signed by*

Neil McKay  
Manager - Facilities

**Schedule U**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Clarington**



**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">North Clarington Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1  
Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the communities of Haydon, Enniskillen, and Tyrone within the North Clarington area of the Municipality of Clarington. The proposed facilities will provide access to natural gas to a forecasted 398 customers (384 residential and 14 commercial / institutional).

The project proposes to tie-in to an existing NPS 12 steel XHP system on the corner of \_\_\_\_\_ and \_\_\_\_\_ with NPS 2 steel XHP to run \_\_\_\_\_ for approximately 800 m to the proposed XHP-HPPE station location at the corner of \_\_\_\_\_ and \_\_\_\_\_. From the proposed station, the proposed NPS 4 polyethylene pipeline runs \_\_\_\_\_ along \_\_\_\_\_ to \_\_\_\_\_ to the proposed distribution system within Enniskillen and Haydon. The proposed distribution pipeline would travel \_\_\_\_\_ from \_\_\_\_\_ along \_\_\_\_\_ to \_\_\_\_\_, and \_\_\_\_\_ on \_\_\_\_\_ to serve the community of Tyrone.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Steel	6	792

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	15,200
Polyethylene	4	9,584

Please refer to Schedule U1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule U2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule U2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule U3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule U4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule U5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule U6 for Enbridge's CPCN for the Municipality of Clarington (EB-2019-0103) that covers all of the Municipality of Clarington and the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule U2, Table 4.2.</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule U2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$9,318,027</p> <p>Please refer to Schedule U2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$23,412</p> <p>Please refer to Schedule U2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$9.40</p> <p>Please refer to Schedule U2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule U2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule U2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule U2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule U4.</p>



**Schedule U1**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Clarington**

# North Clarington - Enniskillen, Haydon & Tyrone



**Schedule U2**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Clarington**

Table 3.2 - Customer Attachments Over The Rate Stability Period

Customer Type	Firm / IT	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total
Residential	Firm		103	92	35	25	19	24	21	24	21	20	384
Commercial	Firm		-	6	3	2	2	-	-	-	-	-	13
Institutional	Firm		-	1	-	-	-	-	-	-	-	-	1
Agricultural	Firm		-	-	-	-	-	-	-	-	-	-	-
Industrial	Firm		-	-	-	-	-	-	-	-	-	-	-
Total Customers			<u>103</u>	<u>99</u>	<u>38</u>	<u>27</u>	<u>21</u>	<u>24</u>	<u>21</u>	<u>24</u>	<u>21</u>	<u>20</u>	<u>398</u>
Cumulative Customers			103	202	240	267	288	312	333	357	378	398	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

Customer Type	Project Year	Annual Volumes - m3										Total
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential		123,600	357,600	510,000	582,000	634,800	686,400	740,400	794,400	848,400	897,600	6,175,200
Commercial		-	9,800	24,500	33,100	40,500	44,200	44,200	44,200	44,200	44,200	328,900
Institutional		-	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	425,000
Agricultural		-	-	-	-	-	-	-	-	-	-	-
Industrial		-	-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>123,600</u>	<u>392,400</u>	<u>584,500</u>	<u>665,100</u>	<u>725,300</u>	<u>780,600</u>	<u>834,600</u>	<u>888,600</u>	<u>942,600</u>	<u>991,800</u>	<u>6,929,100</u>

Customer Type	Project Year	Cumulative Volumes - m3									
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Residential		123,600	481,200	991,200	1,573,200	2,208,000	2,894,400	3,634,800	4,429,200	5,277,600	6,175,200
Commercial		-	9,800	34,300	67,400	107,900	152,100	196,300	240,500	284,700	328,900
Institutional		-	25,000	75,000	125,000	175,000	225,000	275,000	325,000	375,000	425,000
Agricultural		-	-	-	-	-	-	-	-	-	-
Industrial		-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>123,600</u>	<u>516,000</u>	<u>1,100,500</u>	<u>1,765,600</u>	<u>2,490,900</u>	<u>3,271,500</u>	<u>4,106,100</u>	<u>4,994,700</u>	<u>5,937,300</u>	<u>6,929,100</u>

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

	<u>Year 10</u>
Total Capital Costs	

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Revenue Requirement	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total

	<u>Year 10</u>
Closing Rate Base (net of proposed Section 36.2 funding)	

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$9,318,027

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$23,412

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$9.40

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	21,658	67,650	101,010	116,436	127,972	138,156	147,618	157,081	166,543	175,164	\$1,219,288
SES Revenue		28,428	90,252	134,435	152,973	166,819	179,538	191,958	204,378	216,798	228,114	1,593,693
Total Distribution Charge	\$	50,086	157,902	235,445	269,409	294,791	317,694	339,576	361,459	383,341	403,278	\$2,812,981

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	1.00

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	<u>Net Present Value</u>	
<u>Cash Inflow</u>		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule U3**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Clarington**

Section 3.4 North Clarington

Total Forecasted Customers 398 Penetration Rate 74%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Oil	87	22%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 136,666	7.2	-2.7	624	(233)
Electricity F/A	9	2%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 6,590	0.6	3.9	5	37
Electricity Baseboard	3	1%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 2,197	0.6	3.9	2	12
Propane	249	63%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 70,478	5.6	-1.1	1,390	(271)
Wood	6	2%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	44	11%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	398	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 215,930	13.9	4.1	2,022	(455)

<sup>1</sup> Based on completed Market Research for this community. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2400	Gas (incl. fixed)	\$/m3	0.617
Heating oil	L	2623	Heating oil	\$/L	1.163
Electricity	kWh	19460	Electricity	\$/kWh	0.112
Propane	L	3622	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (EGD) April 2020 rates, including 23 cents per m<sup>3</sup> SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 4 (March 2020)

Carbon price is included for all energy types as reported. All costs exclude HST.



**Schedule U4**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Clarington**

## North Clarington Community Expansion Project Pipeline Construction Schedule

Task Name	2022												2023												2024											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Environmental Assessments																																				
Permits & Approvals																																				
Leave to Construct Application and Approval																																				
Pre-Construction, Construction and Testing																																				
In Service																																				

**Schedule U5**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Clarington**



Mayor Adrian Foster

# Clarington

April 24, 2020

Mr. Mark Wilson  
Enbridge Regional Director  
Enbridge Gas Inc.  
500 Consumers Road  
Toronto, ON M2J 1P8

[Mark.Wilson@enbridge.com](mailto:Mark.Wilson@enbridge.com)

Dear Mr. Wilson:

**Re: Expression of Support for Natural Gas Expansion to North Clarington  
(Tyrone, Haydon and Enniskillen)**

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of the Municipality of Clarington, I would like to formally express our interest to have North Clarington (Tyrone, Haydon and Enniskillen) included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

.../2

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Yours truly,

A handwritten signature in dark ink, appearing to be 'Adrian Foster', written in a cursive style.

Adrian Foster  
Mayor

**Schedule U6**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Clarington**

**EB-2019-0103**

## **Certificate of Public Convenience and Necessity**

The Ontario Energy Board grants

**Enbridge Gas Inc.**

approval under section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55, as amended, to construct works to supply natural gas to the

**Municipality of Clarington**

as it is constituted on the date of this Decision and Order.

**DATED** at Toronto, April 25, 2019

**ONTARIO ENERGY BOARD**

Pascale Duguay  
Manager, Application Policy and Climate Change

**Schedule V**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Grenville**



**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">North Grenville Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve communities within the Municipality of North Grenville, specifically along \_\_\_\_\_ and \_\_\_\_\_. The proposed facilities will provide access to natural gas to a forecasted 69 customers (68 residential and 1 commercial / institutional).

Project to tie-in to existing NPS 4 polyethylene pipeline off \_\_\_\_\_. The proposed distribution system heads \_\_\_\_\_ along \_\_\_\_\_ from the tie-in to \_\_\_\_\_, along \_\_\_\_\_ to \_\_\_\_\_ and along \_\_\_\_\_. Approximately 5.7 km of distribution pipe is proposed.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	5,733

Please refer to Schedule V1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule V2, Table 3.2.

3.3

**Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.**

**For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.**

Please refer to Schedule V2, Table 3.3.

3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule V3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule V4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule V5.</p>
3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule V6 for Enbridge's CPCN for the Municipality of North Grenville (RP-2000-0074 / EB-2003-0153) that covers all of the Municipality of North Grenville and the entire area of the proposed project.</p>

Part IV – Cost of Project															
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>														
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</p> <p>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</p> <p>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</p> <p>Please refer to Schedule V2, Table 4.2.</p>														
4.3	<p><b>Provide the total annual forecast revenue requirement of the project over the ten- year rate stability period (using fully allocated OM&amp;A costs) and rate base amount at the end of year ten.</b></p> <p><b>Complete the tables below:</b></p> <p><b>Revenue Requirement</b></p> <table border="1"> <thead> <tr> <th>Description</th> <th>Year 1</th> <th>Year 2...</th> <th>Year 10</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Revenue Requirement</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Description</th> <th>Year 10</th> </tr> </thead> <tbody> <tr> <td>Closing Rate Base</td> <td></td> </tr> </tbody> </table> <p>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</p> <p>Please refer to Schedule V2, Table 4.3.</p>	Description	Year 1	Year 2...	Year 10	Total	Revenue Requirement					Description	Year 10	Closing Rate Base	
Description	Year 1	Year 2...	Year 10	Total											
Revenue Requirement															
Description	Year 10														
Closing Rate Base															

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$1,814,425</p> <p>Please refer to Schedule V2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$26,296</p> <p>Please refer to Schedule V2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$11.28</p> <p>Please refer to Schedule V2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule V2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

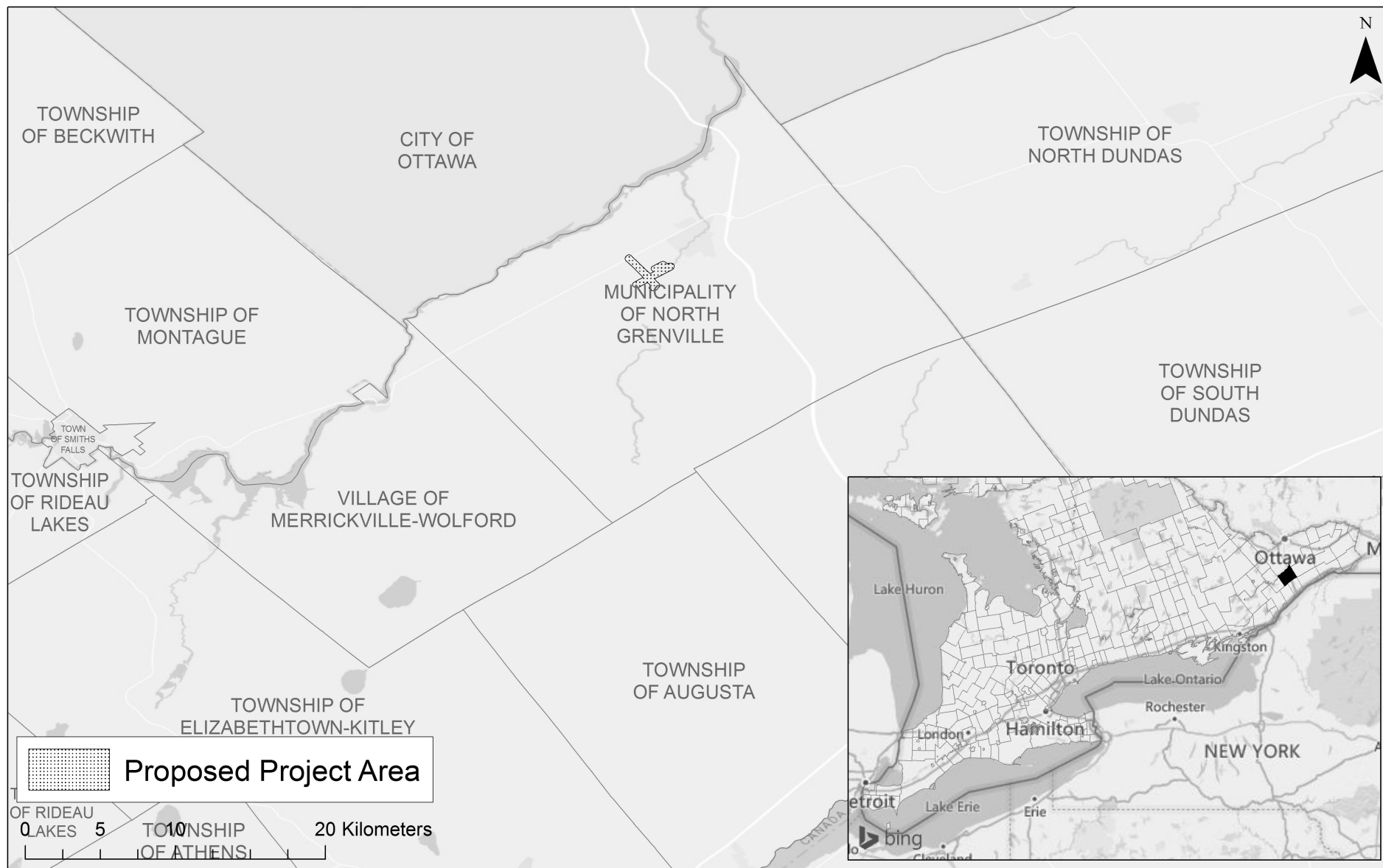
<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule V2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule V2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB’s <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule V4.</p>

**Schedule V1**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Grenville**



# North Grenville



**Schedule V2**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Grenville**

Table 3.2 - Customer Attachments Over The Rate Stability Period

Customer Type	Firm / IT	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total
Residential	Firm		18	16	6	4	4	4	4	4	4	4	68
Commercial	Firm		-	1	-	-	-	-	-	-	-	-	1
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	-	-	-	-	-	-	-	-	-	-
Industrial	Firm		-	-	-	-	-	-	-	-	-	-	-
Total Customers			<u>18</u>	<u>17</u>	<u>6</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>69</u>
Cumulative Customers			18	35	41	45	49	53	57	61	65	69	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

Customer Type	Project Year	Annual Volumes - m3										Total
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential		21,600	62,400	88,800	100,800	110,400	120,000	129,600	139,200	148,800	158,400	1,080,000
Commercial		-	1,200	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	20,400
Institutional		-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	-	-	-	-	-	-	-	-	-	-
Industrial		-	-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>21,600</u>	<u>63,600</u>	<u>91,200</u>	<u>103,200</u>	<u>112,800</u>	<u>122,400</u>	<u>132,000</u>	<u>141,600</u>	<u>151,200</u>	<u>160,800</u>	<u>1,100,400</u>

Customer Type	Project Year	Cumulative Volumes - m3									
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Residential		21,600	84,000	172,800	273,600	384,000	504,000	633,600	772,800	921,600	1,080,000
Commercial		-	1,200	3,600	6,000	8,400	10,800	13,200	15,600	18,000	20,400
Institutional		-	-	-	-	-	-	-	-	-	-
Agricultural		-	-	-	-	-	-	-	-	-	-
Industrial		-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>21,600</u>	<u>85,200</u>	<u>176,400</u>	<u>279,600</u>	<u>392,400</u>	<u>514,800</u>	<u>646,800</u>	<u>788,400</u>	<u>939,600</u>	<u>1,100,400</u>

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

	<u>Year 10</u>
Total Capital Costs	

Table 4.3 - Revenue Requirement Over The Rate Stability Period

	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total
Revenue Requirement												

	<u>Year 10</u>
Closing Rate Base (net of proposed Section 36.2 funding)	

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$1,814,425

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$26,296

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$11.28

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	3,785	11,460	16,612	18,714	20,397	22,079	23,761	25,443	27,125	28,808	\$198,184
SES Revenue		4,968	14,628	20,976	23,736	25,944	28,152	30,360	32,568	34,776	36,984	253,092
Total Distribution Charge	\$	8,753	26,088	37,588	42,450	46,341	50,231	54,121	58,011	61,901	65,792	\$451,276

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	1.00

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	<u>Net Present Value</u>	
<u>Cash Inflow</u>		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule V3**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Grenville**

Section 3.4 North Grenville

Total Forecasted Customers 69 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Oil	14	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 22,746	7.2	-2.7	104	(39)
Electricity F/A	6	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 4,387	0.6	3.9	4	24
Electricity Baseboard	8	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 5,849	0.6	3.9	5	32
Propane	30	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 8,602	5.6	-1.1	170	(33)
Wood	6	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	3	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	69	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 41,584	13.9	4.1	282	(15)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2400	Gas (incl. fixed)	\$/m3	0.617
Heating oil	L	2623	Heating oil	\$/L	1.163
Electricity	kWh	19460	Electricity	\$/kWh	0.112
Propane	L	3622	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (EGD) April 2020 rates, including 23 cents per m<sup>3</sup> SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 4 (March 2020)

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule V4**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Grenville**



## Pipeline Construction Schedule

[illegible]

**Schedule V5**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Grenville**



March 11, 2020

Ian Ross P. Eng, MBA  
Director - Eastern Region Operations  
Enbridge Gas Inc.  
400 Coventry Road | Ottawa, K1K 2C7

Dear Mr. Ross,

**RE: Expression of Support for Natural Gas Expansion to Municipality of North Grenville** [REDACTED]

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of Municipality of North Grenville, I would like to formally express our interest [REDACTED] included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from municipal government, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Sincerely,



Nancy Peckford  
Mayor, North Grenville

***Office of the Mayor***

Municipality of North Grenville

285 County Road 44, Box 130, Kemptville, ON, K0G 1J0

T(613) 258-9569 F(613) 258-9620 [npeckford@northgrenville.on.ca](mailto:npeckford@northgrenville.on.ca)

**Schedule V6**  
**Enbridge Gas Community Expansion Project Proposal**  
**North Grenville**



Ontario Energy  
Board

Commission de l'Énergie  
de l'Ontario



RP-2000-0074

EB-2003-0153

## Certificate of Public Convenience and Necessity

The Ontario Energy Board hereby grants

**Enbridge Gas Distribution Inc.**

approval under section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55, to construct works to supply gas to the

**Township of North Grenville..**

This certificate replaces the certificates of the former municipalities that are now within the Township of North Grenville.

**DATED** at Toronto, January 6, 2004.

ONTARIO ENERGY BOARD

Paul B. Pudge  
Assistant Secretary

**Schedule W**  
**Enbridge Gas Community Expansion Project Proposal**  
**Sarsfield**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Sarsfield Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>



<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the community of Sarsfield located in the eastern portion of the City of Ottawa in the former Township of Cumberland.

The proposed facilities will provide access to natural gas to a forecasted 236 customer (211 residential, 19 commercial / institutional and 4 industrial).

The proposed project will tie-in to an existing NPS 6 steel XHP line on \_\_\_\_\_ and \_\_\_\_\_. The proposed feed to the distribution system heads \_\_\_\_\_ along \_\_\_\_\_ to \_\_\_\_\_, on \_\_\_\_\_ between \_\_\_\_\_ and \_\_\_\_\_. The proposed distribution system includes \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and the tail end of \_\_\_\_\_ in Sarsfield.

A new station is proposed at the tie-in on \_\_\_\_\_ and \_\_\_\_\_.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	6,500
Polyethylene	4	13,500

Please refer to Schedule W1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule W2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule W2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule W3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule W4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule W5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Enbridge Gas holds various Certificates of Public Convenience and Necessity related to specific areas within the City of Ottawa. Please refer to Schedule W6 for Enbridge's CPCN (FBC 196) that covers all of the former Township of Cumberland within which Sarsfield is located.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule W2, Table 4.2.</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule W2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$7,369,447</p> <p>Please refer to Schedule W2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$31,226</p> <p>Please refer to Schedule W2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$8.83</p> <p>Please refer to Schedule W2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule W2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

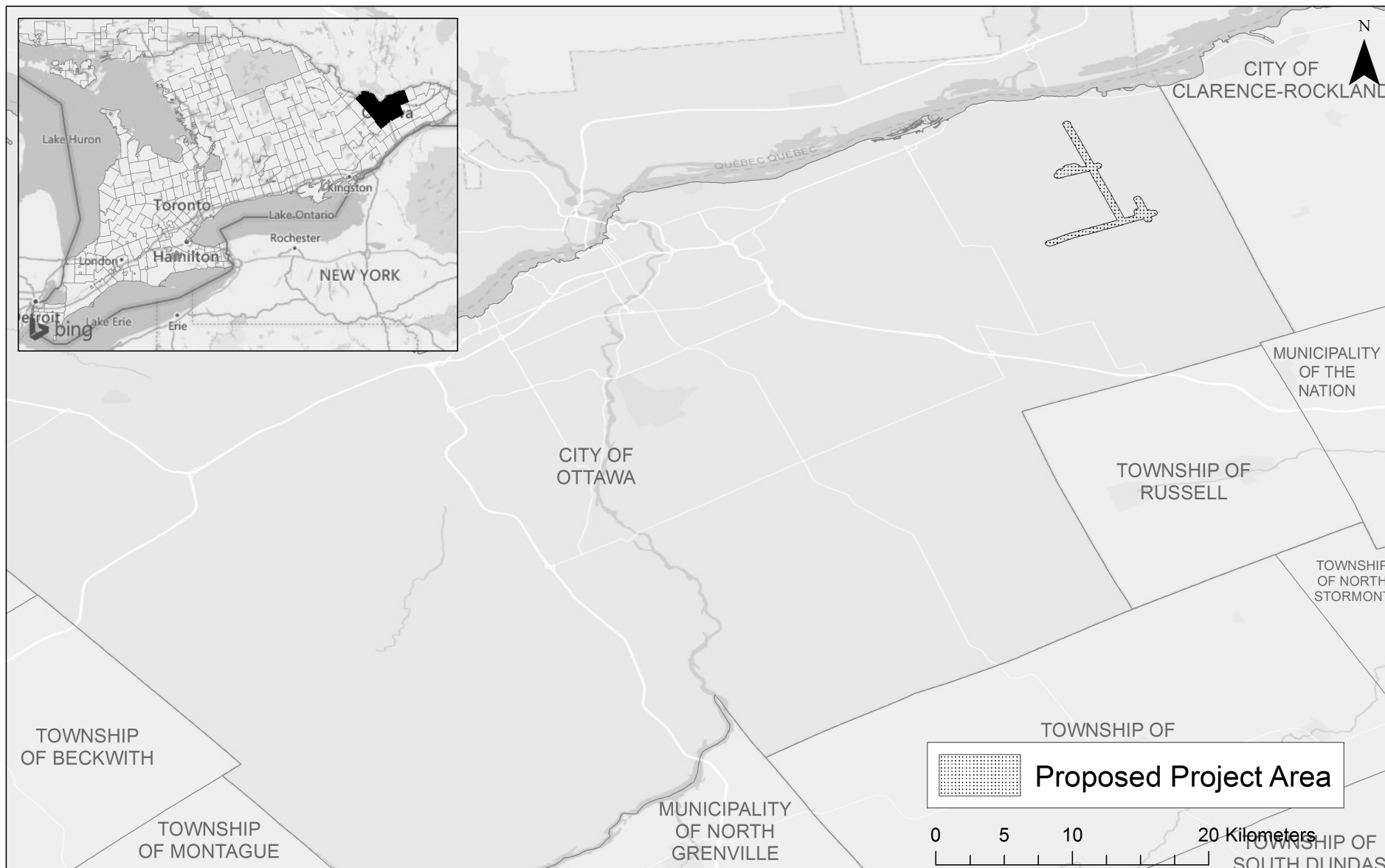
<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule W2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule W2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule W4.</p>

**Schedule W1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Sarsfield**



# Sarsfield



**Schedule W2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Sarsfield**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Residential	Firm		58	50	19	13	11	13	11	13	12	11	211
Commercial	Firm		-	9	4	4	2	-	-	-	-	-	19
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	4	-	-	-	-	-	-	-	-	4
Industrial	Firm		-	2	-	-	-	-	-	-	-	-	2
Total Customers			<u>58</u>	<u>65</u>	<u>23</u>	<u>17</u>	<u>13</u>	<u>13</u>	<u>11</u>	<u>13</u>	<u>12</u>	<u>11</u>	<u>236</u>
Cumulative Customers			58	123	146	163	176	189	200	213	225	236	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Annual Volumes - m3</u>						<u>10</u>	<u>Total</u>
Residential		66,657	191,211	271,067	308,206	336,165	364,124	392,083	420,042	449,201	475,960	475,960	3,274,712
Commercial		-	21,000	51,900	71,700	85,300	89,000	89,000	89,000	89,000	89,000	89,000	674,900
Institutional		-	-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	35,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	595,000
Industrial		-	100,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,700,000
Total Volumes		<u>66,657</u>	<u>347,211</u>	<u>592,967</u>	<u>649,906</u>	<u>691,465</u>	<u>723,124</u>	<u>751,083</u>	<u>779,042</u>	<u>808,201</u>	<u>834,960</u>	<u>834,960</u>	<u>6,244,612</u>

<u>Customer Type</u>	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Cumulative Volumes - m3</u>						<u>10</u>	
Residential		66,657	257,867	528,934	837,140	1,173,304	1,537,428	1,929,510	2,349,552	2,798,752	3,274,712	3,274,712	
Commercial		-	21,000	72,900	144,600	229,900	318,900	407,900	496,900	585,900	674,900	674,900	
Institutional		-	-	-	-	-	-	-	-	-	-	-	
Agricultural		-	35,000	105,000	175,000	245,000	315,000	385,000	455,000	525,000	595,000	595,000	
Industrial		-	100,000	300,000	500,000	700,000	900,000	1,100,000	1,300,000	1,500,000	1,700,000	1,700,000	
Total Volumes		<u>66,657</u>	<u>413,867</u>	<u>1,006,834</u>	<u>1,656,740</u>	<u>2,348,204</u>	<u>3,071,328</u>	<u>3,822,410</u>	<u>4,601,452</u>	<u>5,409,652</u>	<u>6,244,612</u>	<u>6,244,612</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

	<u>Year 10</u>
Total Capital Costs	

Table 4.3 - Revenue Requirement Over The Rate Stability Period

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Revenue Requirement											

	<u>Year 10</u>
Closing Rate Base (net of proposed Section 36.2 funding)	

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$7,369,447

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$31,226

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$8.83

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	11,992	48,624	79,636	91,146	99,711	105,841	110,829	115,817	121,016	125,794	\$910,404
SES Revenue		15,331	79,858	136,382	149,478	159,037	166,318	172,749	179,180	185,886	192,041	1,436,261
Total Distribution Charge	\$	27,323	128,482	216,018	240,624	258,747	272,159	283,578	294,997	306,902	317,834	\$2,346,664

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	1.00

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	<u>Net Present Value</u>	
<u>Cash Inflow</u>		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule W3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Sarsfield**

Section 3.4 Sarsfield

Total Forecasted Customers 236 Penetration Rate 65%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	50	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 77,797	7.2	-2.7	355	(133)
Electricity F/A	21	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 15,005	0.6	3.9	12	83
Electricity Baseboard	28	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 20,007	0.6	3.9	17	111
Propane	104	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 29,421	5.6	-1.1	580	(113)
Wood	21	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	12	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	236	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 142,229	13.9	4.1	965	(52)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2400	Gas (incl. fixed)	\$/m3	0.617
Heating oil	L	2623	Heating oil	\$/L	1.163
Electricity	kWh	19460	Electricity	\$/kWh	0.112
Propane	L	3622	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (EGD) April 2020 rates, including 23 cents per m<sup>3</sup> SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 4 (March 2020)

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule W4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Sarsfield**



## Sarsfield Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule W5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Sarsfield**



**Jim Watson**  
Mayor / Maire

**Office of the Mayor  
City of Ottawa**  
110 Laurier Avenue West  
Ottawa, Ontario K1P 1J1  
Tel.: (613) 580-2496  
Fax: (613) 580-2509  
E-mail: Jim.Watson@ottawa.ca

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Ville d'Ottawa**  
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Tél.: (613) 580-2496  
Télééc.: (613) 580-2509  
Courriel : Jim.Watson@ottawa.ca

EB-2019-0255  
Schedule W5  
Redacted

March 27, 2020

Mr. Ian Ross  
Director - Eastern Region Operations  
Enbridge Gas Inc.  
400 Coventry Road  
Ottawa, ON K1K 2C7

Dear Mr. Ross

**Subject: Ottawa's Expression of Support for natural gas expansion in support of rural residents and businesses**

Thank you for your letter dated February 11, which provided an update on the Government of Ontario's 2020 Natural Gas Expansion Program. The City is pleased that additional funding is available for new service expansion projects in areas that would not be feasible without this support. The City of Ottawa is interested in participating in the call for proposals, which will be submitted by Enbridge Gas. With your support, we would like to put forward the following rural projects for funding:

1. Dunrobin Shores (residential stream; Ward 5)
2. Carlsbad Springs, Sarsfield and surroundings (residential stream; Ward 19)
3. [REDACTED] (economic development stream; Ward 20)

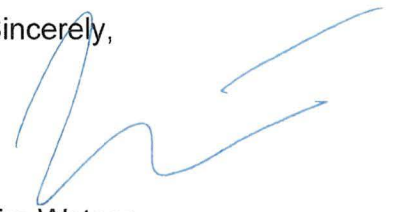
Based on the guidelines issued by the Ontario Energy Board (EB-2019-0255), we are aware that Enbridge Gas may be required to include support for the proposed projects from Council, as applicable, demonstrated through a written expression of support or a commitment to financial support in its project submissions. We look forward to engaging with you on next steps, as required, to secure this formal support from Ottawa's City Council.

[.../2]

We understand that natural gas is the most common and affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas, the OEB and the Ministry of Energy, Northern Development and Mines to bring this service to underserved rural communities. We look forward to working together to expand natural gas access in order to attract new opportunities, help create jobs and lower monthly costs for our residents living in Ottawa's rural communities.

I look forward to engaging further with you on this initiative to support greater access of natural gas for our residents and businesses in underserved communities.

Sincerely,



Jim Watson  
Mayor  
City of Ottawa

c.c.: Councillor Eli El-Chantiry, Ward 5  
Councillor George Darouze, Ward 20  
Steve Willis, GM, Planning, Infrastructure and Economic Development  
Geraldine Wildman, Program Manager, Natural Systems & Rural Affairs  
Sonia Fazari, Senior Advisor, Eastern Region, Enbridge Gas

**Schedule W6**  
**Enbridge Gas Community Expansion Project Proposal**  
**Sarsfield**

11.2 F.B.C. 196

IN THE MATTER OF The Municipal  
Franchises Act, R. S. O. 1950 Chapter  
249 and amendments thereto;

EB-2019-0255  
Schedule W6

AND IN THE MATTER OF an Application  
by The Consumers' Gas Company for a  
certificate of public convenience and  
necessity to construct works and to  
supply natural gas to the Township of  
Cumberland in the County of Prescott  
and Russell

**B E F O R E:**

A. R. Crozier, Chairman } Friday, the 31st day  
W. R. Howard, Commissioner } of January, 1958.

**CERTIFICATE OF PUBLIC CONVENIENCE  
AND NECESSITY**

UPON THE APPLICATION of The Consumers' Gas Company  
(hereinafter referred to as the "Applicant") for a certificate  
pursuant to the provisions of The Municipal Franchises Act,  
R. S. O. 1950 Chapter 249 and amendments thereto and upon  
the hearing of such application by the Board in the City of  
Toronto on the 31st day of January, 1958, after due notice of  
such hearing had been given as directed by the Board, in the  
presence of Counsel for the Applicant, no one else appearing,  
upon consideration of the evidence and exhibits produced at the  
hearing and upon hearing what was alleged by Counsel aforesaid,

1. THIS BOARD DOETH ORDER THAT a Certificate of Public  
Convenience and Necessity be and the same is hereby granted to  
The Consumers' Gas Company for the supply of natural gas to the  
inhabitants of the Township of Cumberland and for the construction  
of the works necessary therefor.

2. The Board fixes the costs of this Application at  
\$5.00 payable forthwith by the Applicant.

DATED at Toronto this 10th day of February 1958.

ONTARIO FUEL BOARD

.....  
Chairman

.....  
Commissioner

**Schedule X**  
**Enbridge Gas Community Expansion Project Proposal**  
**South Dundas**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">South Dundas Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>



<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1  
Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the Township of South Dundas in eastern Ontario. The proposed facilities will provide access to natural gas to a forecasted 125 customers (96 residential, 26 commercial / institutional and 3 industrial).

The proposed tie-in point will be near the intersection of \_\_\_\_\_ and \_\_\_\_\_ connecting to existing TC Energy pipeline. The proposed distribution pipeline will consist of 10,800 m of 2" polyethylene pipe and 4,320 m of 4" polyethylene pipe. The proposed distribution system will extend \_\_\_\_\_ via \_\_\_\_\_ to \_\_\_\_\_, to \_\_\_\_\_ and \_\_\_\_\_.

There will be no reinforcement required to accommodate additional loads for the system. A new class 7 TC Energy station is required to be installed on \_\_\_\_\_ and \_\_\_\_\_.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	10,800

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	4,320

Please refer to Schedule X1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule X2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule X2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule X3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule X4, for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule X5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule X6 for Enbridge's CPCN for the Township of South Dundas (EB-2006-0142) that covers the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule X2, Table 4.2.</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule X2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$6,101,876</p> <p>Please refer to Schedule X2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$48,815</p> <p>Please refer to Schedule X2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$8.33</p> <p>Please refer to Schedule X2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule X2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

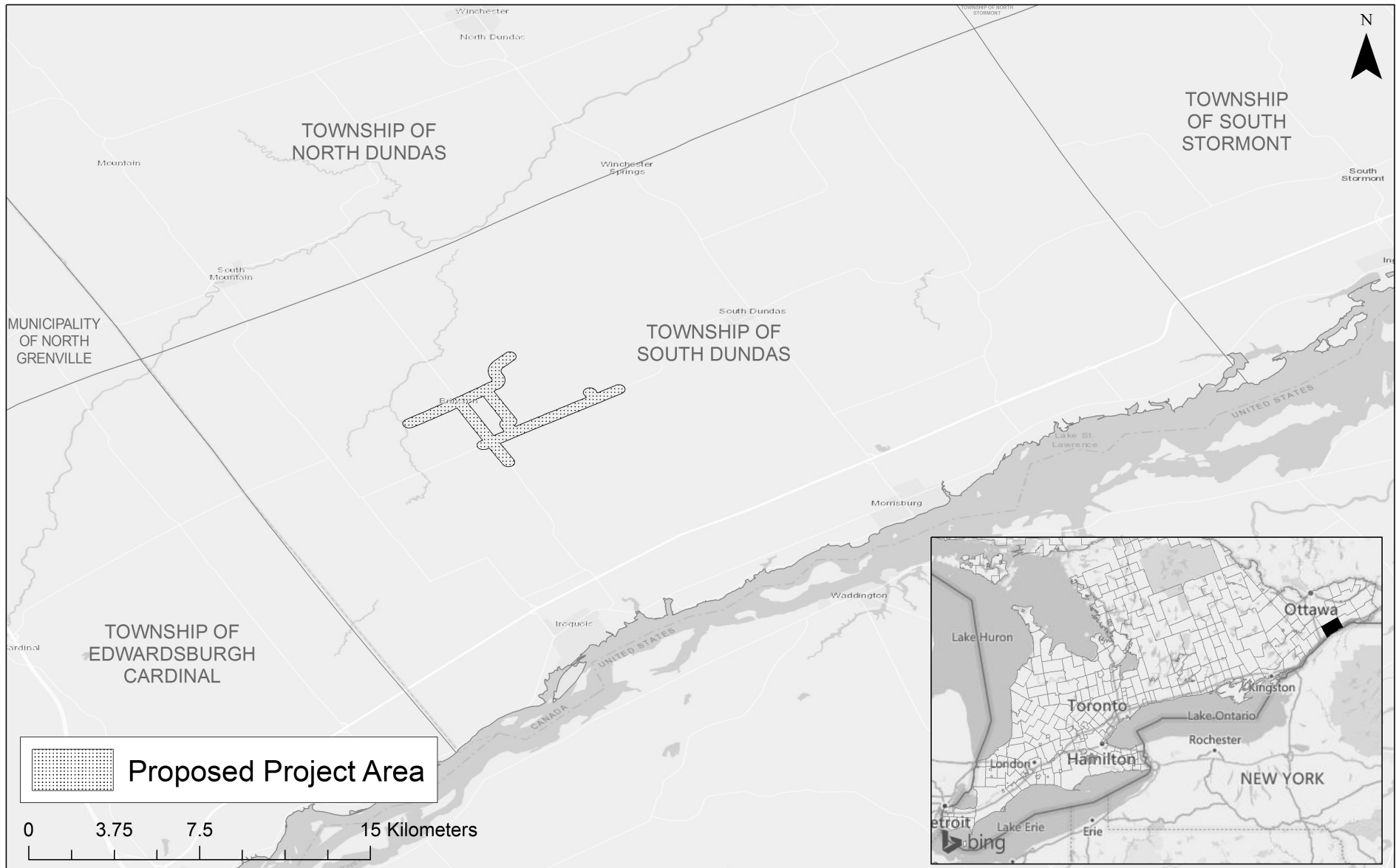
<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule X2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule X2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> <li>• System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule X4.</p>

**Schedule X1**  
**Enbridge Gas Community Expansion Project Proposal**  
**South Dundas**



# South Dundas



**Schedule X2**  
**Enbridge Gas Community Expansion Project Proposal**  
**South Dundas**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>
Residential	Firm
Commercial	Firm
Institutional	Firm
Agricultural	Firm
Industrial	Firm
Total Customers	
Cumulative Customers	

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	30	22	15	7	7	3	3	3	3	3	96
	-	10	6	2	1	-	-	-	-	-	19
	-	-	-	-	-	-	-	-	-	-	-
	-	7	-	-	-	-	-	-	-	-	7
	-	3	-	-	-	-	-	-	-	-	3
	<u>30</u>	<u>42</u>	<u>21</u>	<u>9</u>	<u>8</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>125</u>
	30	72	93	102	110	113	116	119	122	125	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Annual Volumes - m3</u>		<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	33,000	90,200	130,900	155,100	170,500	181,500	188,100	194,700	201,300	207,900	1,553,200
	-	17,700	43,400	53,600	56,900	58,000	58,000	58,000	58,000	58,000	461,600
	-	-	-	-	-	-	-	-	-	-	-
	-	83,300	166,600	166,600	166,600	166,600	166,600	166,600	166,600	166,600	1,416,100
	-	150,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	2,550,000
	<u>33,000</u>	<u>341,200</u>	<u>640,900</u>	<u>675,300</u>	<u>694,000</u>	<u>706,100</u>	<u>712,700</u>	<u>719,300</u>	<u>725,900</u>	<u>732,500</u>	<u>5,980,900</u>

<u>Customer Type</u>
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Cumulative Volumes - m3</u>		<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
	33,000	123,200	254,100	409,200	579,700	761,200	949,300	1,144,000	1,345,300	1,553,200	
	-	17,700	61,100	114,700	171,600	229,600	287,600	345,600	403,600	461,600	
	-	-	-	-	-	-	-	-	-	-	
	-	83,300	249,900	416,500	583,100	749,700	916,300	1,082,900	1,249,500	1,416,100	
	-	150,000	450,000	750,000	1,050,000	1,350,000	1,650,000	1,950,000	2,250,000	2,550,000	
	<u>33,000</u>	<u>374,200</u>	<u>1,015,100</u>	<u>1,690,400</u>	<u>2,384,400</u>	<u>3,090,500</u>	<u>3,803,200</u>	<u>4,522,500</u>	<u>5,248,400</u>	<u>5,980,900</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

Total Capital Costs
---------------------

<u>Year 10</u>

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Revenue Requirement
---------------------

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>

Closing Rate Base (net of proposed Section 36.2 funding)
--

<u>Year 10</u>

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project \$ 6,101,876

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served \$ Year 10  
48,815

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Year 10 Volume (m3) \$ Year 10  
8.33

Table 6.1 - Distribution Charge

	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Distribution Revenue	\$	6,950	40,818	72,725	79,799	83,737	86,285	87,675	89,065	90,455	91,845	\$ 729,354
SES Revenue		7,590	78,476	147,407	155,319	159,620	162,403	163,921	165,439	166,957	168,475	1,375,607
Total Distribution Charge	\$	<u>14,540</u>	<u>119,294</u>	<u>220,132</u>	<u>235,118</u>	<u>243,357</u>	<u>248,688</u>	<u>251,596</u>	<u>254,504</u>	<u>257,412</u>	<u>260,320</u>	<u>\$ 2,104,961</u>

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	<u>Net Present Value</u>
<u>Cash Inflow</u>	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
<u>Cash Outflow</u>	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	<u>1.00</u>

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value	
Cash Inflow		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
Cash Outflow		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule X3**  
**Enbridge Gas Community Expansion Project Proposal**  
**South Dundas**

Section 3.4 South Dundas

Total Forecasted Customers 125 Penetration Rate 65%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	26	21%	\$ 5,000	\$ 2,787	\$ 1,495	\$ 1,292	\$ 33,917	6.6	-2.4	172	(64)
Electricity F/A	11	9%	\$ 5,000	\$ 1,998	\$ 1,495	\$ 503	\$ 5,657	0.5	3.6	6	40
Electricity Baseboard	15	12%	\$ 12,000	\$ 1,998	\$ 1,495	\$ 503	\$ 7,543	0.5	3.6	8	54
Propane	55	44%	\$ 600	\$ 1,611	\$ 1,495	\$ 116	\$ 6,394	5.1	-1.0	281	(54)
Wood	11	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	6	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	125	100%	\$ 31,100	\$ 8,395	\$ 5,981	\$ 2,414	\$ 53,512	12.7	3.8	467	(24)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 01 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2200	Gas (incl. fixed)	\$/m3	0.680
Heating oil	L	2397	Heating oil	\$/L	1.163
Electricity	kWh	17778	Electricity	\$/kWh	0.112
Propane	L	3309	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (Union Gas North East) April 2020 rates, including 23 cents per m3 SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices are currently unavailable for the Union North Rate zones.

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule X4**  
**Enbridge Gas Community Expansion Project Proposal**  
**South Dundas**



## Pipeline Construction Schedule

[illegible]

**Schedule X5**  
**Enbridge Gas Community Expansion Project Proposal**  
**South Dundas**



**MUNICIPALITY OF SOUTH DUNDAS**

34 Ottawa Street, P.O. Box 740  
Morrisburg ON K0C 1X0  
613.543.2673 | southdundas.com

March 20, 2020

Enbridge Gas Inc.  
Attention: Luke Skaarup

Dear Mr. Skaarup:

**Re: Expression of Support for Natural Gas Expansion to the  
Municipality of South Dundas**

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our Municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of the Municipality of South Dundas, I would like to formally express our interest to have the Municipality of South Dundas included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OED (EB-2019-0225) we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc. the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Yours truly,

A handwritten signature in black ink, appearing to read 'Steven Byvelds', written in a cursive style.

Steven Byvelds  
Mayor  
Municipality of South Dundas

BB/er

**Schedule X6**  
**Enbridge Gas Community Expansion Project Proposal**  
**South Dundas**

EB-2006-0142

## **Certificate of Public Convenience and Necessity**

The Ontario Energy Board hereby grants

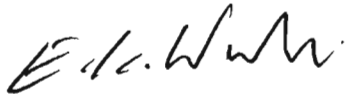
### **Union Gas Limited**

approval under section 8 of the Municipal Franchises Act, R.S.O. 1990, c.M-55, to  
construct works to supply gas to the

### **Corporation of the Township of South Dundas**

Dated at Toronto, August 9, 2006

**ONTARIO ENERGY BOARD**

A handwritten signature in black ink, appearing to read 'K. Walli', with a stylized flourish at the end.

Kirsten Walli  
Board Secretary

**Schedule Y**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Charles**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">St. Charles Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>



<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the Municipality of St. Charles located in the Sudbury District. The proposed facilities will provide access to natural gas to a forecasted 162 customers (143 residential, 18 commercial / institutional and 1 industrial).

The proposed tie-in point will be near the intersection of \_\_\_\_\_ and \_\_\_\_\_ connecting to an existing 10" steel pipeline. The proposed distribution pipeline will consist of 5,650 m of 2" polyethylene pipe and 9,750 m of 4" polyethylene pipe. The proposed distribution system will extend \_\_\_\_\_ along \_\_\_\_\_ to \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and parts of \_\_\_\_\_ and \_\_\_\_\_.

There will be no reinforcement required to accommodate additional loads for the system. One station required upsizing in St. Charles Sudbury.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	5,650

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	9,750

Please refer to Schedule Y1 for Project Map.

3.2

**Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.**

Please refer to Schedule Y2, Table 3.2.

3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule Y2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule Y3, Table 3.4.</p>
3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule Y4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule Y5.</p>

3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Enbridge Gas does not currently hold a Certificate of Public Convenience and Necessity for the Municipality of St. Charles because the only facilities currently in place within the municipality are transmission-related and they do not provide service to an end-user.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility's proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent's project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule Y2, Table 4.2.</p>

4.3

**Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.**

**Complete the tables below:**

**Revenue Requirement**

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

**Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).**

Please refer to Schedule Y2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$6,385,185</p> <p>Please refer to Schedule Y2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$39,415</p> <p>Please refer to Schedule Y2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$12.10</p> <p>Please refer to Schedule Y2, Table 5.3.</p>

<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule Y2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule Y2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule Y2, Table 7.2.</p>

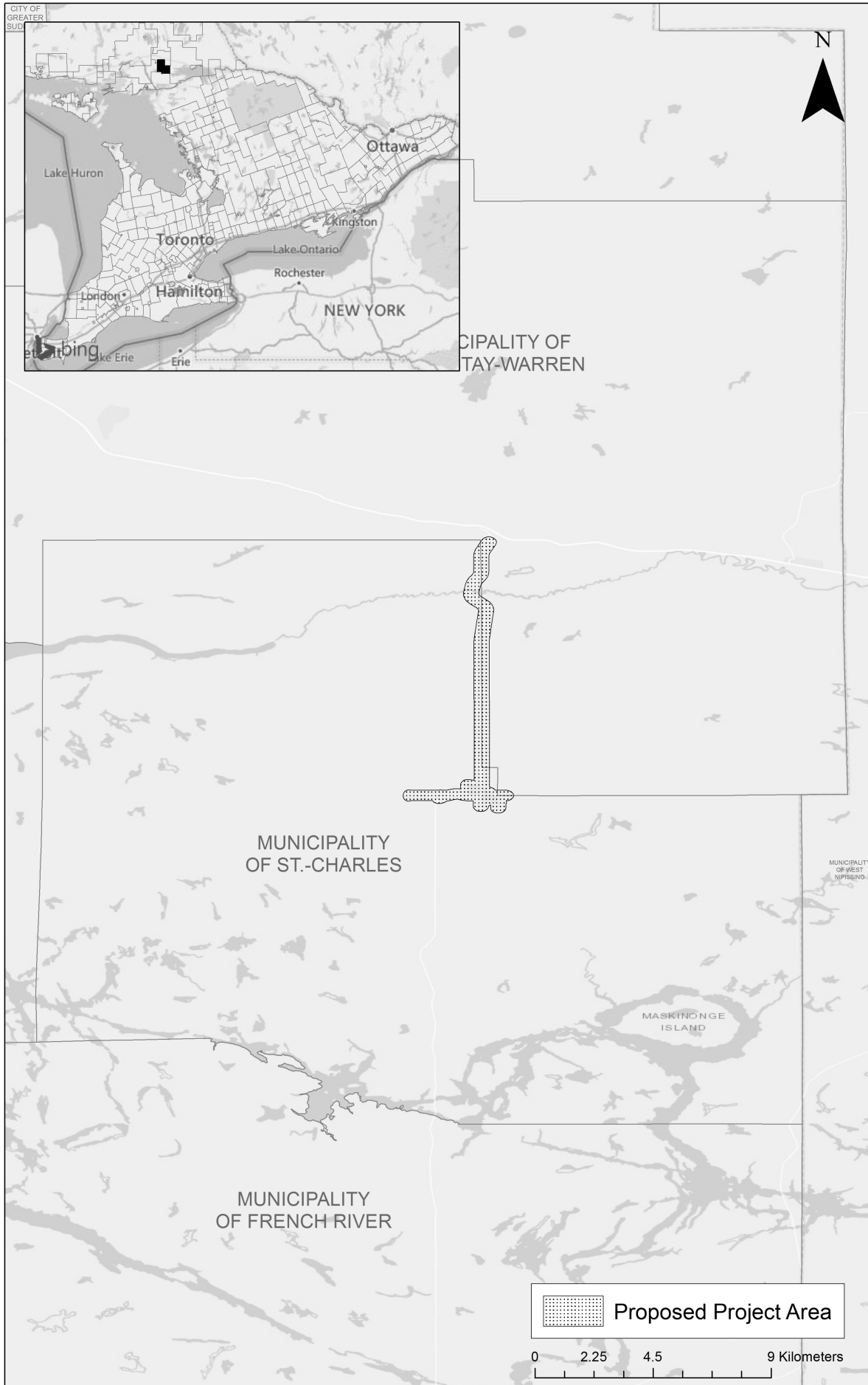
<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> <li>• System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB's <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule Y4.</p>

**Schedule Y1**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Charles**



# St. Charles

EB-2019-0255  
Schedule Y1  
Redacted



**Schedule Y2**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Charles**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>
Residential	Firm
Commercial	Firm
Institutional	Firm
Agricultural	Firm
Industrial	Firm
Total Customers	
Cumulative Customers	

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	44	33	22	12	12	4	4	4	4	4	143
	-	11	2	2	2	-	-	-	-	-	17
	-	1	-	-	-	-	-	-	-	-	1
	-	-	-	-	-	-	-	-	-	-	-
	-	1	-	-	-	-	-	-	-	-	1
	<u>44</u>	<u>46</u>	<u>24</u>	<u>14</u>	<u>14</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>162</u>
	44	90	114	128	142	146	150	154	158	162	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Annual Volumes - m3</u>		<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	46,798	129,575	189,434	226,193	252,272	269,872	278,672	287,472	296,272	305,072	2,281,630
	-	25,500	54,600	61,800	69,000	72,600	72,600	72,600	72,600	72,600	573,900
	-	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	425,000
	-	-	-	-	-	-	-	-	-	-	-
	-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
	<u>46,798</u>	<u>230,075</u>	<u>394,034</u>	<u>437,993</u>	<u>471,272</u>	<u>492,472</u>	<u>501,272</u>	<u>510,072</u>	<u>518,872</u>	<u>527,672</u>	<u>4,130,530</u>

<u>Customer Type</u>
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Cumulative Volumes - m3</u>		<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	46,798	176,372	365,806	591,998	844,270	1,114,142	1,392,814	1,680,286	1,976,558	2,281,630	
	-	25,500	80,100	141,900	210,900	283,500	356,100	428,700	501,300	573,900	
	-	25,000	75,000	125,000	175,000	225,000	275,000	325,000	375,000	425,000	
	-	-	-	-	-	-	-	-	-	-	
	-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000	
	<u>46,798</u>	<u>276,872</u>	<u>670,906</u>	<u>1,108,898</u>	<u>1,580,170</u>	<u>2,072,642</u>	<u>2,573,914</u>	<u>3,083,986</u>	<u>3,602,858</u>	<u>4,130,530</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

Total Capital Costs
---------------------

<u>Year 10</u>
----------------

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Revenue Requirement
---------------------

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
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Closing Rate Base (net of proposed Section 36.2 funding)
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<u>Year 10</u>
----------------

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 6,385,185
--	--------------

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<a href="#">Year 10</a> \$ 39,415
---	--------------------------------------

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Year 10 Volume (m3)	<a href="#">Year 10</a> \$ 12.10
---	-------------------------------------

Table 6.1 - Distribution Charge

	<a href="#">Project Year</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">9</a>	<a href="#">10</a>	<a href="#">Total</a>
Distribution Revenue	\$	10,046	37,463	60,488	69,480	76,185	80,479	82,332	84,185	86,039	87,892	\$ 674,590
SES Revenue		10,763	52,917	90,628	100,738	108,393	113,269	115,293	117,317	119,341	121,365	950,022
Total Distribution Charge	\$	<u>20,810</u>	<u>90,380</u>	<u>151,116</u>	<u>170,219</u>	<u>184,578</u>	<u>193,747</u>	<u>197,625</u>	<u>201,502</u>	<u>205,379</u>	<u>209,257</u>	<u>\$ 1,624,612</u>

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

<u>Cash Inflow</u>	<u>Net Present Value</u>	
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Proposed Section 36.2 Funding		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)		<u>1.00</u>

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value	
Cash Inflow		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
Cash Outflow		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule Y3**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Charles**

Section 3.4 St Charles

Total Forecasted Customers 162 Penetration Rate 65%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	34	21%	\$ 5,000	\$ 2,787	\$ 1,460	\$ 1,328	\$ 45,169	6.6	-2.4	223	(83)
Electricity F/A	15	9%	\$ 5,000	\$ 1,998	\$ 1,460	\$ 538	\$ 7,851	0.5	3.6	8	52
Electricity Baseboard	19	12%	\$ 12,000	\$ 1,998	\$ 1,460	\$ 538	\$ 10,468	0.5	3.6	10	70
Propane	71	44%	\$ 600	\$ 1,611	\$ 1,460	\$ 152	\$ 10,827	5.1	-1.0	364	(70)
Wood	15	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	8	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	162	100%	\$ 31,100	\$ 8,395	\$ 5,838	\$ 2,557	\$ 74,316	12.7	3.8	605	(31)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 01 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2200	Gas (incl. fixed)	\$/m3	0.663
Heating oil	L	2397	Heating oil	\$/L	1.163
Electricity	kWh	17778	Electricity	\$/kWh	0.112
Propane	L	3309	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (Union Gas North West) April 2020 rates, including 23 cents per m3 SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices are currently unavailable for the Union North Rate zones.

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule Y4**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Charles**



## St. Charles Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule Y5**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Charles**



*La Corporation de la Municipalité de / The Corporation of the Municipality of*  
**ST. CHARLES**

C.P. / Box 70, 2 King Street East St.-Charles ON  
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EB-2019-0255  
Schedule Y5

**MOVED BY: Councillor Paul Branconnier**

**SECONDED BY: Councillor Richard Lemieux**

**RESOLUTION NO. 2020-53**

WHEREAS access to natural gas infrastructure is limited in parts of the Municipality of St.-Charles and increased access will provide more affordable and reliable energy;

AND WHEREAS expanding access to natural gas within the Municipality of St.-Charles is a key to residential, commercial, institutional and industrial growth supported by Council;

AND WHEREAS access to natural gas for residents, farms, commerce and institutions will provide an economic advantage;

AND WHEREAS natural gas access provides residents on higher-emitting fuels with a lower carbon energy source that will help reduce greenhouse gas emission;

BE IT RESOLVED that Council for the Corporation of the Municipality of St.-Charles formally supports an application submitted by Enbridge to the Government of Ontario, to the provincial Natural Gas Grant Program, to expand the natural gas system to service the Municipality of St.-Charles;

BE IT FURTHER RESOLVED that Council supports making a financial contribution towards the proposed project in an amount equivalent to the Municipality of St.-Charles property tax that would be recovered on the new natural gas infrastructure for a period of ten (10) years maximum as per the Natural Gas Grant program requirements;

BE IT FURTHER RESOLVED that a copy of this Resolution be forwarded along with the application to Ontario's Natural Gas Grant Program, Endbridge, John Vanthof MPP and Marc Serré MP.

**CARRIED**

**I, Tammy Godden, Clerk of the Municipality of St.-Charles, do certify the foregoing to be a true copy of Resolution No. 2020-53 passed in a Special Meeting**




*La Corporation de la Municipalité de / The Corporation of the Municipality of*  
**ST. CHARLES**

C.P. / Box 70, 2 King Street East St.-Charles ON  
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P0M 2W0  
[www.stcharlesontario.ca](http://www.stcharlesontario.ca)

**of Council of The Corporation of the Municipality of St.-Charles on the 18<sup>th</sup> day of March 2020.**

  
\_\_\_\_\_  
Tammy Godden  
Clerk  
Municipality of St.-Charles

Dated this 19<sup>th</sup> day of March 2020.

**Schedule Z**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Isidore**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">St. Isidore Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1

Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the community of St. Isidore in The Nation Municipality within the United Counties of Prescott and Russell. The proposed facilities will provide access to natural gas to a forecasted 386 customers (309 residential, 62 commercial / institutional and 15 industrial).

The proposed tie-in of the NPS 6 polyethylene supply lateral is within the Village of Casselman on the intersection of \_\_\_\_\_ and \_\_\_\_\_ where a new station is proposed to cut the pressure for the distribution system in St. Isidore. This tie-in would bring gas 19 km from the existing system in Casselman \_\_\_\_\_ along \_\_\_\_\_ to \_\_\_\_\_. The distribution system within St. Isidore includes approximately 25 km of polyethylene pipe and facilities to bring gas \_\_\_\_\_ of St. Isidore to the industrial customers near \_\_\_\_\_ as well as \_\_\_\_\_ of St. Isidore up to \_\_\_\_\_, and along \_\_\_\_\_ to provide gas to various agricultural and residential.

The project requires reinforcement of the existing system at the outlet of the \_\_\_\_\_ in the \_\_\_\_\_ area of the City of Ottawa in order to support the demand of St. Isidore. The reinforcement includes 8.3 km of NPS 6 steel XHP pipe to parallel existing NPS 6 facilities. Additionally, the \_\_\_\_\_ will require a rebuild in order to support the increased capacity required of the station.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
HP Polyethylene	6	19,000

The approximate length and size of the reinforcement required:

Pipe Type	Diameter (NPS)	Length (m)
Steel	6	8,300

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	17,000
Polyethylene	4	7,800

Please refer to Schedule Z1 for Project Map.



3.2	<p><b>Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.</b></p> <p>Please refer to Schedule Z2, Table 3.2.</p>
3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule Z2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule Z3, Table 3.4.</p>

3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule Z4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule Z5.</p>
3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule Z6 for Enbridge's CPCN for The Nation Municipality (EB-2007-0059) that covers all of The Nation Municipality and the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>

4.2

Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).

Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).

For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.

Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility’s proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent’s project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.

Please refer to Schedule Z2, Table 4.2.

4.3

Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&A costs) and rate base amount at the end of year ten.

Complete the tables below:

Revenue Requirement

Description	Year 1	Year 2...	Year 10	Total
Revenue Requirement				

Description	Year 10
Closing Rate Base	

Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).

Please refer to Schedule Z2, Table 4.3.

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$27,535,894</p> <p>Please refer to Schedule Z2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$71,337</p> <p>Please refer to Schedule Z2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$9.78</p> <p>Please refer to Schedule Z2, Table 5.3.</p>

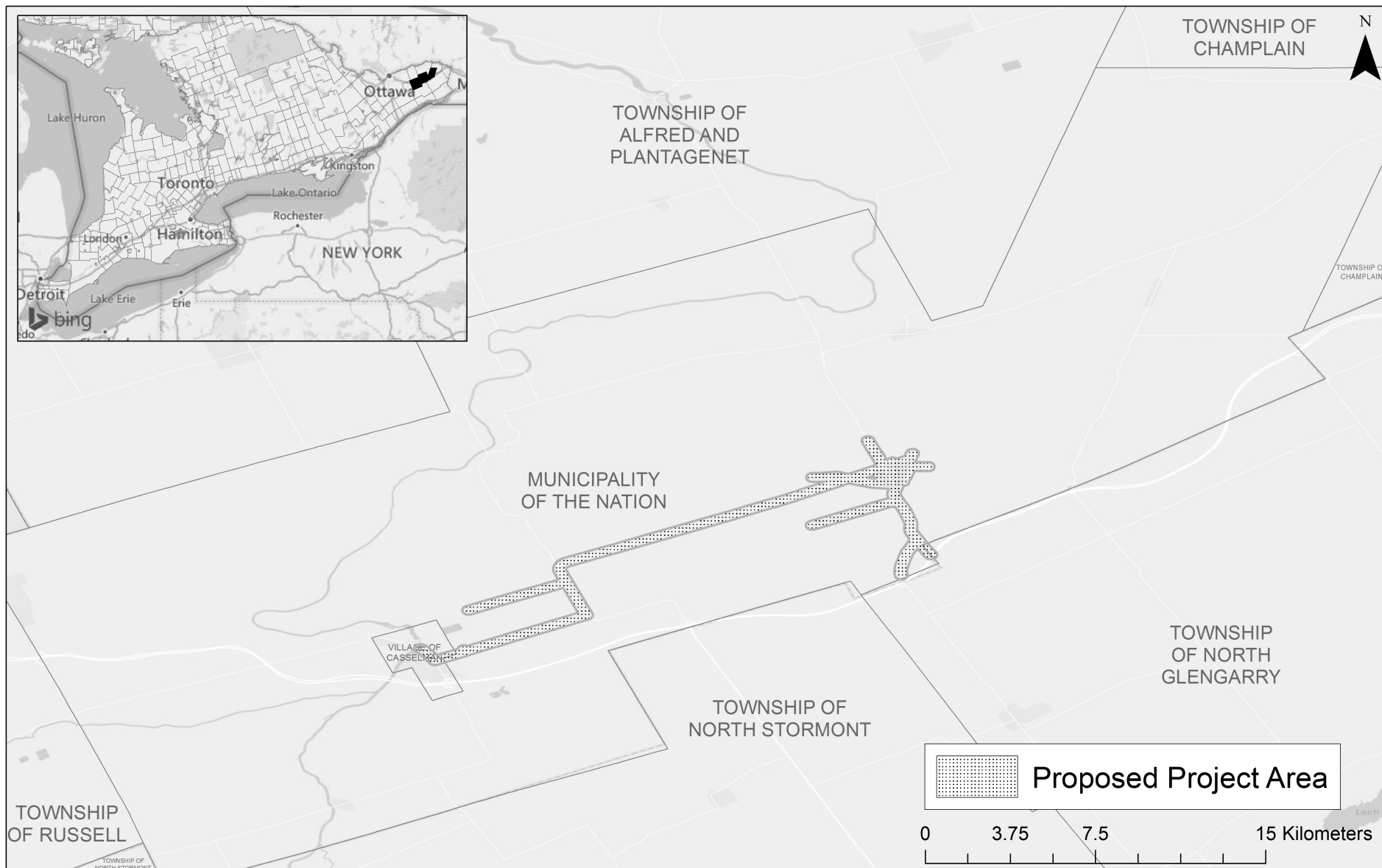
<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule Z2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule Z2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule Z2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB’s <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule Z4.</p>

**Schedule Z1**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Isidore**

# St. Isidore



**Schedule Z2**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Isidore**



Table 3.2 - Customer Attachments Over The Rate Stability Period

Customer Type	Firm / IT	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total
Residential	Firm		83	75	29	20	15	19	16	19	17	16	309
Commercial	Firm		-	24	9	4	4	1	1	1	1	1	46
Institutional	Firm		-	1	-	-	-	-	-	-	-	-	1
Agricultural	Firm		-	7	5	3	-	-	-	-	-	-	15
Industrial	Firm		-	5	3	1	1	1	1	1	1	1	15
Total Customers			<u>83</u>	<u>112</u>	<u>46</u>	<u>28</u>	<u>20</u>	<u>21</u>	<u>18</u>	<u>21</u>	<u>19</u>	<u>18</u>	<u>386</u>
Cumulative Customers			83	195	241	269	289	310	328	349	368	386	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

Customer Type	Project Year	Annual Volumes - m3										Total
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential		97,077	281,631	402,647	459,765	500,924	540,883	582,042	623,201	665,560	704,319	4,858,045
Commercial		-	44,200	106,900	135,300	155,100	166,200	168,600	171,000	173,400	175,800	1,296,500
Institutional		-	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	425,000
Agricultural		-	83,600	239,600	373,200	434,400	434,400	434,400	434,400	434,400	434,400	3,302,800
Industrial		-	250,000	650,000	850,000	950,000	1,050,000	1,150,000	1,250,000	1,350,000	1,450,000	8,950,000
Total Volumes		<u>97,077</u>	<u>684,431</u>	<u>1,449,147</u>	<u>1,868,265</u>	<u>2,090,424</u>	<u>2,241,483</u>	<u>2,385,042</u>	<u>2,528,601</u>	<u>2,673,360</u>	<u>2,814,519</u>	<u>18,832,345</u>

Customer Type	Project Year	Cumulative Volumes - m3									
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
Residential		97,077	378,708	781,355	1,241,119	1,742,043	2,282,925	2,864,967	3,488,167	4,153,727	4,858,045
Commercial		-	44,200	151,100	286,400	441,500	607,700	776,300	947,300	1,120,700	1,296,500
Institutional		-	25,000	75,000	125,000	175,000	225,000	275,000	325,000	375,000	425,000
Agricultural		-	83,600	323,200	696,400	1,130,800	1,565,200	1,999,600	2,434,000	2,868,400	3,302,800
Industrial		-	250,000	900,000	1,750,000	2,700,000	3,750,000	4,900,000	6,150,000	7,500,000	8,950,000
Total Volumes		<u>97,077</u>	<u>781,508</u>	<u>2,230,655</u>	<u>4,098,919</u>	<u>6,189,343</u>	<u>8,430,825</u>	<u>10,815,867</u>	<u>13,344,467</u>	<u>16,017,827</u>	<u>18,832,345</u>

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

	<u>Year 10</u>
Total Capital Costs	

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Revenue Requirement	Project Year	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	Total

	<u>Year 10</u>
Closing Rate Base (net of proposed Section 36.2 funding)	

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$27,535,894

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$71,337

Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$9.78

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	17,278	85,223	160,318	197,927	219,198	234,309	247,722	261,135	274,758	287,751	\$1,985,619
SES Revenue		22,328	157,419	333,304	429,701	480,797	515,541	548,560	581,578	614,873	647,339	4,331,439
Total Distribution Charge	\$	39,605	242,642	493,622	627,628	699,995	749,850	796,282	842,713	889,631	935,090	\$6,317,058

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Proposed Section 36.2 Funding	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)	1.00

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value
Cash Inflow	
Revenue:	
Distribution Revenue	
System Expansion Surcharge (SES) Revenue	
Total Revenue (A)	
Expenses:	
O&M Expense	
Municipal Tax	
Income Tax	
Total Expenses (B)	
Total Cash Inflow (C = A + B)	
Cash Outflow	
Gross Capital	
Change in Working Capital	
Total Cash Outflow (D)	
Profitability Index (PI) Without Section 36.2 Funding (C / D)	

**Schedule Z3**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Isidore**

Section 3.4 St. Isidore

Total Forecasted Customers 386 Penetration Rate 65%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	81	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 127,244	7.2	-2.7	581	(217)
Electricity F/A	35	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 24,542	0.6	3.9	20	136
Electricity Baseboard	46	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 32,723	0.6	3.9	27	181
Propane	170	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 48,120	5.6	-1.1	949	(185)
Wood	35	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	19	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	386	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 232,629	13.9	4.1	1,578	(85)

<sup>1</sup> Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specially, the fuel share distribution from 27 prospective expansion areas surveyed in 2018 and 2020 were averaged, with weights based number of homes in each area. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate 1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2400	Gas (incl. fixed)	\$/m3	0.617
Heating oil	L	2623	Heating oil	\$/L	1.163
Electricity	kWh	19460	Electricity	\$/kWh	0.112
Propane	L	3622	Propane	\$/L	0.487

Notes:

Gas prices correspond to EGI (EGD) April 2020 rates, including 23 cents per m<sup>3</sup> SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 4 (March 2020)

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule Z4**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Isidore**

## Pipeline Construction Schedule

[illegible]

**Schedule Z5**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Isidore**



March 4, 2020

Dear Mr Ian Ross P.

**Re: Expression of Support for Natural Gas Expansion to *The NATION MUNICIPALITY / Servicing the town of St-Isidore project, (Priority 1)***

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of *THE NATION MUNICIPALITY*, I would like to formally express our interest to have *Servicing the town of St-Isidore project* included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Sincerely,

A handwritten signature in black ink, appearing to read 'François St-Amour'.

François St-Amour  
Mayor  
The Nation Municipality  
613-764-5444  
Francois.St-Amour@nationmun.ca

**Schedule Z6**  
**Enbridge Gas Community Expansion Project Proposal**  
**St. Isidore**

**EB-2007-0059**

## **Certificate of Public Convenience and Necessity**

The Ontario Energy Board hereby grants

**Enbridge Gas Distribution Inc.**

approval under section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55, as amended, to construct works to supply gas to the

**The Nation Municipality**

This certificate replaces the certificate associated with the former Township of Cambridge that is now within The Nation Municipality.

**DATED** at Toronto, May 1, 2007

ONTARIO ENERGY BOARD

*Original signed by*

Neil McKay  
Manager, Facilities Applications

**Schedule AA**  
**Enbridge Gas Community Expansion Project Proposal**  
**Williamsford and McCullough Lake**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Williamsford and McCullough Lake Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<p><i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i></p> <p><i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i></p>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1  
Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the communities of Williamsford and McCullough Lake on the North Saugeen River in the Township of Chatsworth in Grey County. The proposed facilities will provide access to natural gas to a forecasted 176 customers (167 residential and 9 commercial / institutional).

The proposed tie-in of the plastic supply lateral is in the Township of Chatsworth west of Williamsford on \_\_\_\_\_ just \_\_\_\_ of \_\_\_\_\_. This tie-in will bring gas from the existing Owen Sound Line into the distribution systems of Williamsford and McCullough Lake using approximately 5 km of NPS 2 polyethylene pipe. This tie-in is complex since the line operates at greater than 30% SMYS.

One station is proposed as part of the project, located at the tie-in from the Owen Sound Line on \_\_\_\_\_. The distribution system within Williamsford crosses the North Saugeen River and includes approximately 5.6 km of NPS 2 polyethylene pipe. The distribution system in McCullough Lake is approximately 2 km of NPS 2 polyethylene pipe. Phase 5 of the Owen Sound Line reinforcement project is assumed to be installed to accommodate this project.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Plastic	2	5,000

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	7,625

Please refer to Schedule AA1 for Project Map.

3.2	<p><b>Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.</b></p> <p>Please refer to Schedule AA2, Table 3.2.</p>
3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule AA2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule AA3, Table 3.4.</p>



3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule AA4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule AA5.</p>
3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule AA6.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>

4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility’s proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent’s project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule AA2, Table 4.2.</p>														
4.3	<p><b>Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&amp;A costs) and rate base amount at the end of year ten.</b></p> <p><b>Complete the tables below:</b></p> <p><b>Revenue Requirement</b></p> <table border="1"> <tr> <td><b>Description</b></td><td><b>Year 1</b></td><td><b>Year 2...</b></td><td><b>Year 10</b></td><td><b>Total</b></td></tr> <tr> <td>Revenue Requirement</td><td></td><td></td><td></td><td></td></tr> </table> <table border="1"> <tr> <td><b>Description</b></td><td><b>Year 10</b></td></tr> <tr> <td>Closing Rate Base</td><td></td></tr> </table> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p>Please refer to Schedule AA2, Table 4.3.</p>	<b>Description</b>	<b>Year 1</b>	<b>Year 2...</b>	<b>Year 10</b>	<b>Total</b>	Revenue Requirement					<b>Description</b>	<b>Year 10</b>	Closing Rate Base	
<b>Description</b>	<b>Year 1</b>	<b>Year 2...</b>	<b>Year 10</b>	<b>Total</b>											
Revenue Requirement															
<b>Description</b>	<b>Year 10</b>														
Closing Rate Base															

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$5,945,819</p> <p>Please refer to Schedule AA2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$33,783</p> <p>Please refer to Schedule AA2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$17.00</p> <p>Please refer to Schedule AA2, Table 5.3.</p>

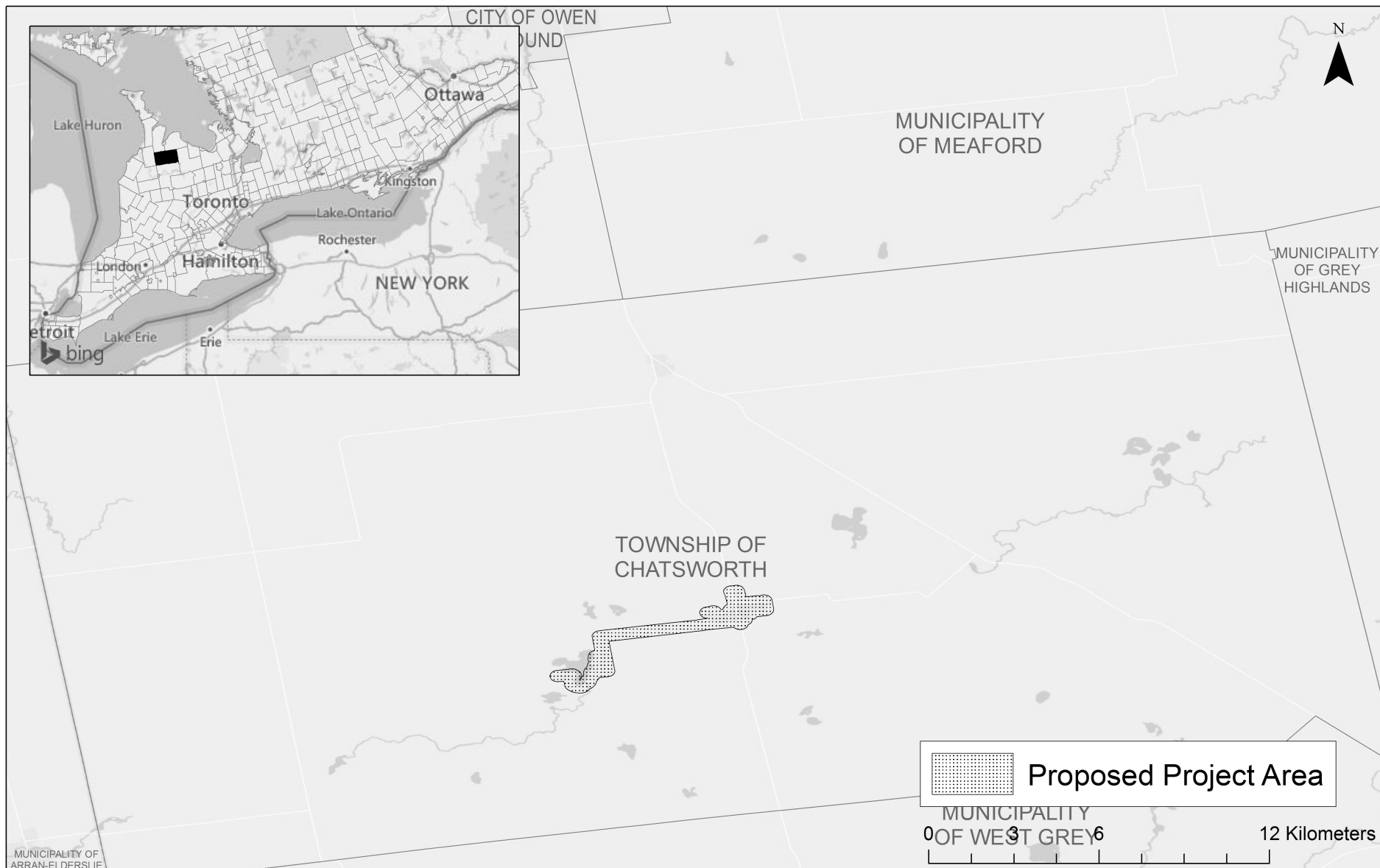
<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule AA2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule AA2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule AA2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> <li>• System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB’s <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule AA4.</p>

**Schedule AA1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Williamsford and McCullough Lake**

# Williamsford and McCullough Lake



**Schedule AA2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Williamsford and McCullough Lake**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>
Residential	Firm
Commercial	Firm
Institutional	Firm
Agricultural	Firm
Industrial	Firm
Total Customers	
Cumulative Customers	

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	51	38	25	12	12	5	6	6	6	6	167
	-	4	2	1	1	-	-	-	-	-	8
	-	-	-	-	-	-	-	-	-	-	-
	-	1	-	-	-	-	-	-	-	-	1
	-	-	-	-	-	-	-	-	-	-	-
	<u>51</u>	<u>43</u>	<u>27</u>	<u>13</u>	<u>13</u>	<u>5</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>176</u>
	51	94	121	134	147	152	158	164	170	176	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>	<u>Annual Volumes - m3</u>										<u>Total</u>
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	47,740	131,010	189,860	224,290	246,510	262,598	273,130	284,240	295,350	306,460	2,261,188
Commercial	-	5,800	15,200	19,900	22,100	23,200	23,200	23,200	23,200	23,200	179,000
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	10,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	170,000
Industrial	-	-	-	-	-	-	-	-	-	-	-
Total Volumes	<u>47,740</u>	<u>146,810</u>	<u>225,060</u>	<u>264,190</u>	<u>288,610</u>	<u>305,798</u>	<u>316,330</u>	<u>327,440</u>	<u>338,550</u>	<u>349,660</u>	<u>2,610,188</u>

<u>Customer Type</u>	<u>Cumulative Volumes - m3</u>										
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	47,740	178,750	368,610	592,900	839,410	1,102,008	1,375,138	1,659,378	1,954,728	2,261,188	
Commercial	-	5,800	21,000	40,900	63,000	86,200	109,400	132,600	155,800	179,000	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	10,000	30,000	50,000	70,000	90,000	110,000	130,000	150,000	170,000	
Industrial	-	-	-	-	-	-	-	-	-	-	
Total Volumes	<u>47,740</u>	<u>194,550</u>	<u>419,610</u>	<u>683,800</u>	<u>972,410</u>	<u>1,278,208</u>	<u>1,594,538</u>	<u>1,921,978</u>	<u>2,260,528</u>	<u>2,610,188</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

Total Capital Costs	<u>Year 10</u>

Table 4.3 - Revenue Requirement Over The Rate Stability Period

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Revenue Requirement											

Closing Rate Base (net of proposed Section 36.2 funding)	<u>Year 10</u>



Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 5,945,819
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Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<u>Year 10</u> \$ 33,783
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Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Year 10 Volume (m3)	<u>Year 10</u> \$ 17.00
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Table 6.1 - Distribution Charge

	<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Distribution Revenue	\$	8,080	23,275	34,715	41,099	45,221	48,082	49,832	51,729	53,627	55,524	\$ 411,183
SES Revenue		10,980	33,766	51,764	60,764	66,380	70,333	72,756	75,311	77,867	80,422	600,343
Total Distribution Charge	\$	<u>19,060</u>	<u>57,041</u>	<u>86,478</u>	<u>101,863</u>	<u>111,601</u>	<u>118,416</u>	<u>122,588</u>	<u>127,041</u>	<u>131,493</u>	<u>135,946</u>	<u>\$ 1,011,526</u>

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

<u>Cash Inflow</u>	<u>Net Present Value</u>	
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Proposed Section 36.2 Funding		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)		<u>1.00</u>

Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value	
Cash Inflow		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
Cash Outflow		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule AA3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Williamsford and McCullough Lake**

Section 3.4 Williamsford and McCullough Lake

Total Forecasted Customers 176 Penetration Rate 74%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Oil	16	9%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 24,499	6.7	-2.5	104	(39)
Electricity F/A	12	7%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 9,440	0.5	3.6	7	44
Electricity Baseboard	8	4%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 2,869	0.5	3.6	4	28
Propane	105	59%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 38,524	5.2	-1.1	543	(111)
Wood	31	18%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	4	3%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	176	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 75,332	12.9	3.6	657	(78)

<sup>1</sup> Based on completed Market Research for this community. Fuel percentages may not add up to 100% due to rounding error.

<sup>2</sup> Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate M1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2200	Gas (incl. fixed)	\$/m3	0.572
Heating oil	L	2433	Heating oil	\$/L	1.163
Electricity	kWh	18046	Electricity	\$/kWh	0.112
Propane	L	3359	Propane	\$/L	0.484

Notes:

Gas prices correspond to EGI (Union Gas South) April 2020 rates, including 23 cents per m3 SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

South Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 1 (March 2020).

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule AA4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Williamsford and McCullough Lake**

## Williamsford and McCullough Lake Community Expansion Project Pipeline Construction Schedule

Task Name	2022												2023												2024											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Environmental Assessments																																				
Permits & Approvals																																				
Leave to Construct Application and Approval																																				
Pre-Construction, Construction and Testing																																				
In Service																																				

**Schedule AA5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Williamsford and McCullough Lake**



316837 Highway 6, RR 1  
Chatsworth, Ontario N0H 1G0  
Telephone 519-794-3232 - Fax 519-794-4499

March 6, 2020

Via email [murray.costello@enbridge.com](mailto:murray.costello@enbridge.com)

Murray Costello, P. Eng.  
Director, Southeast Operations  
Enbridge Gas Inc.

Dear Mr. Costello,

RE: Expression of Support for natural Gas Expansion to McCullough Lake

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses, specifically in the areas of McCullough Lake and Williamsford.

On behalf of the Township of Chatsworth, I would like to formally express our interest to have these two areas included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (eb2019-0255), WE ARE AWARE THAT Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Sincerely,

Patty Sinnamon, Dipl.M.M.  
CAO Clerk  
Township of Chatsworth  
Email: [psinnamon@chatsworth.ca](mailto:psinnamon@chatsworth.ca)



**Schedule AA6**  
**Enbridge Gas Community Expansion Project Proposal**  
**Williamsford and McCullough Lake**

**EB-2008-0081**

## **Certificate of Public Convenience and Necessity**

The Ontario Energy Board hereby grants

**Union Gas Limited**

approval under section 8 of the *Municipal Franchises Act*, R.S.O. 1990, c. M.55, as amended, to construct works to supply gas to the

**Township of Chatsworth**

This Certificate of Public Convenience and Necessity replaces those parts of Certificate E.B.C. 29 relating to the former Village of Chatsworth, the former Township of Holland and the former Township of Sullivan.

**DATED** at Toronto, May 23, 2008

ONTARIO ENERGY BOARD

*Original Signed By*

Neil McKay  
Manager - Facilities

**Schedule BB**  
**Enbridge Gas Community Expansion Project Proposal**  
**Wroxeter, Gorrie and Fordwich**

**Enbridge Gas Inc.**  
**Potential Projects to Expand Access to Natural Gas Distribution**

<b>Part I – Name of Proponent</b>	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <a href="#">Wroxeter, Gorrie and Fordwich Community Expansion Project</a>	
Address of Head Office: 50 Keil Drive North Chatham, ON N7M 5M1	Telephone Number: 519-436-4600
Name of Individual to Contact:  Patrick McMahon	Office Telephone Number: 519-436-5325
	Cell Phone Number: 519-437-0759
	Email Address: <a href="mailto:patrick.mcmahon@enbridge.com">patrick.mcmahon@enbridge.com</a>

<b>Part II – Description of Proponent's Technical Expertise and Financial Capability</b>
<i>Natural gas distributors that are currently rate-regulated by the OEB are not required to complete this Part.</i>
<i>A proponent that is not currently rate-regulated as a natural gas distributor by the OEB and that has multiple proposed projects is only required to provide the information in this Part once, unless the proponent has different organizational or financial structure approaches for its projects. In that case, the information in this Part must be provided for each different organizational or financing structure.</i>

<b>Part II – Description of Proponent’s Technical Expertise and Financial Capability</b>	
2.1	<p><b>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</b></p> <p>N/A</p>
2.2	<p><b>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</b></p> <ul style="list-style-type: none"> <li>• <b>Current credit rating of the proponent, its parent or associated companies.</b></li> <li>• <b>Financial statements for each of the past two fiscal years. This may include audited financial statements, annual reports, prospectuses or other such information. If the proponent does not have financial statements (because it is a new entrant), the proponent is instead to provide pro forma financial statements for two years along with notes or business plans explaining the assumptions used in preparing the pro forma statements, where the documents must be signed by at least one key individual.</b></li> <li>• <b>If the proponent needs to raise additional debt or equity to finance the proposed project, evidence of the proponent’s ability to access the debt and equity markets.</b></li> </ul> <p><b>New entrants that cannot provide the information identified in this section should explain why that is the case and provide the best information that they have available.</b></p> <p>N/A</p>

### Part III – Description of and Support for Project

3.1  
Redacted

**Provide a general overview of the project, which is to include the following: communities to be connected, including whether the project would serve any on-reserve Indigenous communities; existing population of each community by residential, commercial/institutional and industrial sectors; routing; length of pipeline; and nominal pipe size.**

Enbridge Gas is proposing to serve the communities of Wroxeter, Gorrie and Fordwich in the Township of Howick within Huron County. The proposed facilities will provide access to natural gas to a forecasted 560 customers (494 residential, 64 commercial / institutional and 2 industrial).

The proposed tie-in of the steel supply lateral is in Wingham at the intersection of \_\_\_\_\_ and \_\_\_\_\_. This tie-in would bring gas from the existing system 18 km \_\_\_\_\_ along \_\_\_\_\_ and \_\_\_\_\_, into the distribution systems of the three communities. A total of four stations are proposed as part of the project: one station in Wroxeter on \_\_\_\_\_ near \_\_\_\_\_, one station in Gorrie at the intersection of \_\_\_\_\_ and \_\_\_\_\_, and two stations in Fordwich, with one on \_\_\_\_\_ near \_\_\_\_\_, and one at the intersection of \_\_\_\_\_ and \_\_\_\_\_. The distribution systems within all three communities cross the Maitland River waterway at 5 locations and includes approximately 29 km of polyethylene pipe. One segment of steel pipe on \_\_\_\_\_ to \_\_\_\_\_ near Seaforth is required to reinforce the existing system.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Steel	4	10,870
Steel	6	7,100

The approximate length and size of the reinforcement required:

Pipe Type	Diameter (NPS)	Length (m)
Steel	10	9,700

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	28,000
Polyethylene	4	925

Please refer to Schedule BB1 for Project Map.

3.2	<p><b>Provide the annual and cumulative forecast of the number of customer attachments over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community. Indicate for each customer type whether the service to be provided would be firm or interruptible.</b></p> <p>Please refer to Schedule BB2, Table 3.2.</p>
3.3	<p><b>Provide the annual and cumulative forecast of volumes (in m<sup>3</sup>) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</b></p> <p><b>For the residential segment, the default value for the average consumption level is 2,200 m<sup>3</sup> per year. A proponent that has more accurate information regarding the annual consumption for residential customers in a given community may use that value, in which case it must explain how it has determined that it is more accurate than the default.</b></p> <p>Please refer to Schedule BB2, Table 3.3.</p>
3.4	<p><b>Provide the estimated conversion costs to convert each of the existing heating systems (e.g., propane forced air, oil forced air, electric forced air and electric baseboard) and water-heating systems (e.g., electric, oil and propane) to natural gas. To the extent available, provide information on the current proportion of customers on each type of heating system.</b></p> <p><b>Provide the estimated annual costs of the existing alternative fuels relative to natural gas, including the annual savings with natural gas. The calculation of household energy costs for natural gas should include conversion costs, commodity costs, associated upstream transportation costs to Ontario, incremental CNG and LNG costs (where applicable), costs under the federal <i>Greenhouse Gas Pollution Pricing Act</i> and distribution costs. The assessment of household energy cost impacts should include greenhouse gas (GHG) emission estimates (whether positive or negative) related to converting existing heating and water heating systems to natural gas. The major assumptions (e.g., conversion factors) used in the calculations must also be provided.</b></p> <p>Please refer to Schedule BB3, Table 3.4.</p>

3.5	<p><b>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</b></p> <p>Please refer to Schedule BB4 for Proposed Construction Schedule.</p>
3.6	<p><b>Provide letter(s) from the Band Council(s) and/or local government, as applicable, stating support for the project, including details of any commitment to financial support.</b></p> <p>Please refer to Schedule BB5.</p>
3.7	<p><b>Provide a copy of the Certificate of Public Convenience and Necessity (Certificate) for the area to be served, if held by the project proponent. If not, indicate whether another entity holds the Certificate for the area to be served, if known, and if so, identify the Certificate holder.</b></p> <p><b>Where the project proponent holds a Certificate for the areas to be served, specify the boundaries of the Certificate and indicate whether the boundaries encompass the entire area that would be supplied by the proposed project.</b></p> <p>Please refer to Schedule BB6 for Enbridge's CPCN for the Township of Howick (EBC 290) that covers all of the Township of Howick and the entire area of the proposed project.</p>
<b>Part IV – Cost of Project</b>	
4.1	<p><b>Confirm that the proposed project includes a ten-year rate stability period.</b></p> <p>The proposed project does include a ten-year rate stability period.</p>



4.2	<p><b>Provide the total forecast of capital costs (including any forecast of upstream reinforcement costs) of the project at the end of the rate stability period (i.e., year ten).</b></p> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p><b>For projects proposing to use CNG and/or LNG, the costs of required infrastructure and other associated costs must be included as part of the total project capital costs.</b></p> <p><b>Include any upstream reinforcement costs in the total cost of the project. To the extent that the reinforcement costs for an incumbent utility’s proposed project are materially different from the reinforcement costs that the utility has estimated for another proponent’s project in the same area, the incumbent utility must identify in its filing that two separate estimates exist and explain the reasons for the differences.</b></p> <p>Please refer to Schedule BB2, Table 4.2.</p>														
4.3	<p><b>Provide the total annual forecast revenue requirement of the project over the ten-year rate stability period (using fully allocated OM&amp;A costs) and rate base amount at the end of year ten.</b></p> <p><b>Complete the tables below:</b></p> <p><b>Revenue Requirement</b></p> <table border="1"> <tr> <td><b>Description</b></td><td><b>Year 1</b></td><td><b>Year 2...</b></td><td><b>Year 10</b></td><td><b>Total</b></td></tr> <tr> <td>Revenue Requirement</td><td></td><td></td><td></td><td></td></tr> </table> <table border="1"> <tr> <td><b>Description</b></td><td><b>Year 10</b></td></tr> <tr> <td>Closing Rate Base</td><td></td></tr> </table> <p><b>Where applicable, the inflation rate to be used is the most recent quarter average GDP IPI FDD. For interest during construction, the proponent is to use the OEB-prescribed interest rate for construction work in progress (CWIP).</b></p> <p>Please refer to Schedule BB2, Table 4.3.</p>	<b>Description</b>	<b>Year 1</b>	<b>Year 2...</b>	<b>Year 10</b>	<b>Total</b>	Revenue Requirement					<b>Description</b>	<b>Year 10</b>	Closing Rate Base	
<b>Description</b>	<b>Year 1</b>	<b>Year 2...</b>	<b>Year 10</b>	<b>Total</b>											
Revenue Requirement															
<b>Description</b>	<b>Year 10</b>														
Closing Rate Base															

<b>Part V – Section 36.2 Funding</b>	
5.1	<p><b>Provide the total amount of section 36.2 funding needed to support the project.</b></p> <p>\$38,450,594</p> <p>Please refer to Schedule BB2, Table 5.1.</p>
5.2	<p><b>Provide the section 36.2 funding amount per customer number served in year ten of the project.</b></p> <p>\$68,662</p> <p>Please refer to Schedule BB2, Table 5.2.</p>
5.3	<p><b>Provide the section 36.2 funding amount per volume (m<sup>3</sup>) in year ten of the project.</b></p> <p>\$24.24</p> <p>Please refer to Schedule BB2, Table 5.3.</p>

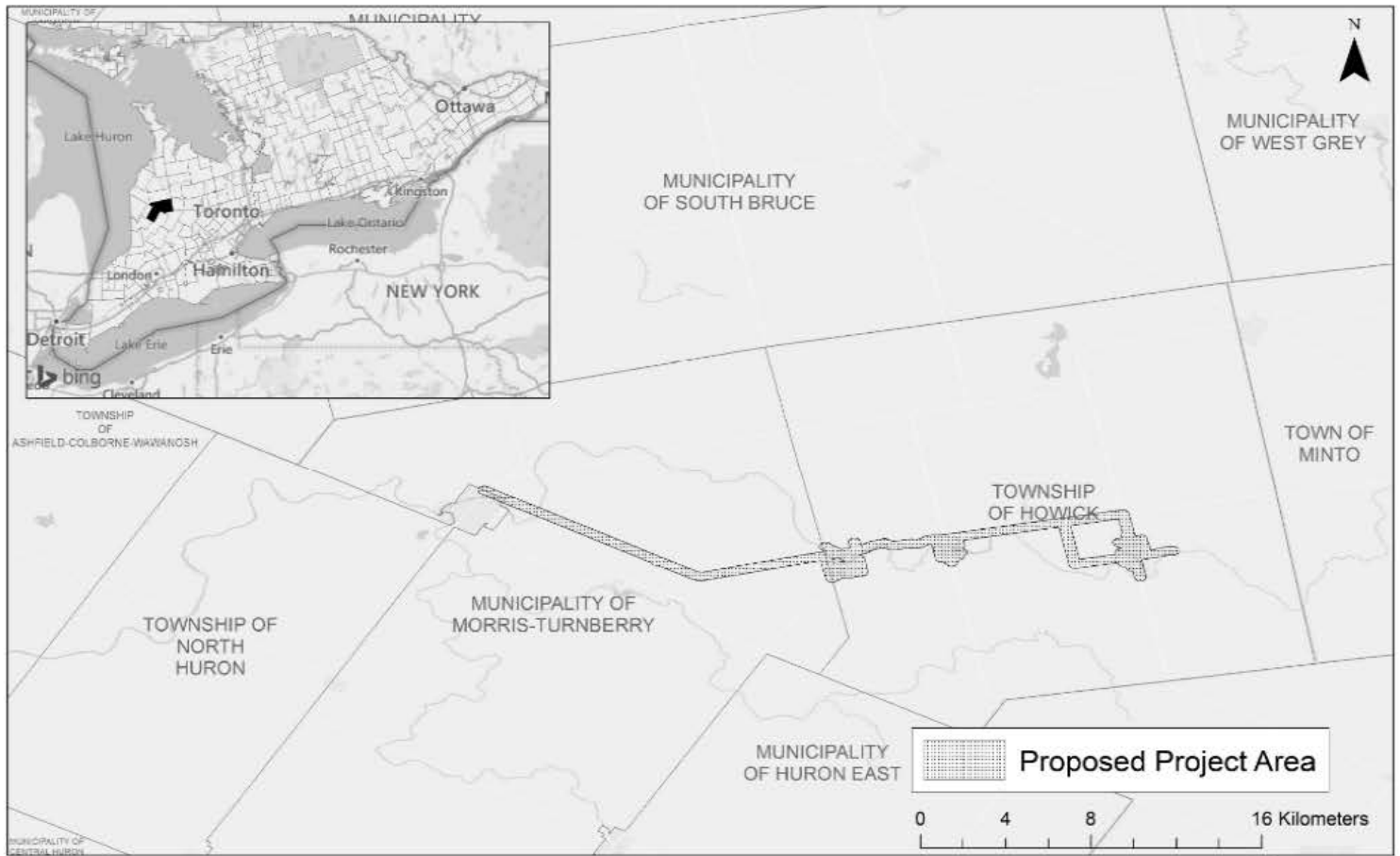
<b>Part VI – Distribution Charge</b>	
6.1	<p><b>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</b></p> <p><b>Provide a confirmation that there would be no material cross-subsidization between rate classes.</b></p> <p>Please refer to Schedule BB2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

<b>Part VII – Profitability Index / Benefit to Cost Ratio</b>	
7.1	<p><b>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</b></p> <p><b>The project must have a PI of 1.0. The PI is to be calculated based on an individual project (i.e., not a “portfolio” of projects).</b></p> <p>Please refer to Schedule BB2, Table 7.1.</p>
7.2	<p><b>Provide, in a summary table that otherwise meets the requirements of section 7.1, the expected PI of the project without the proposed section 36.2 funding.</b></p> <p>Please refer to Schedule BB2, Table 7.2.</p>

<b>Part VIII – OEB Approvals</b>	
8.1	<p><b>Identify any OEB approvals that will be required for the project (Leave to Construct, Certificate of Public Convenience and Necessity, Municipal Franchise Agreement, Rate Order).</b></p> <ul style="list-style-type: none"> <li>• Leave to Construct</li> <li>• System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)</li> </ul>
8.2	<p><b>For OEB approvals identified in section 8.1, provide a schedule for applying for them and the date by which each of these approvals is required to meet the proposed in-service date. For this purpose, proponents should reference the performance standards posted on the OEB’s <a href="#">website</a> and where applicable assume a written hearing process.</b></p> <p>Please refer to Schedule BB4.</p>

**Schedule BB1**  
**Enbridge Gas Community Expansion Project Proposal**  
**Wroxeter, Gorrie and Fordwich**

## Wroxeter / Gorrie / Forwich



**Schedule BB2**  
**Enbridge Gas Community Expansion Project Proposal**  
**Wroxeter, Gorrie and Fordwich**

Table 3.2 - Customer Attachments Over The Rate Stability Period

<u>Customer Type</u>	<u>Firm / IT</u>
Residential	Firm
Commercial	Firm
Institutional	Firm
Agricultural	Firm
Industrial	Firm
Total Customers	
Cumulative Customers	

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
	153	114	76	38	38	15	15	15	15	15	494
	-	30	10	6	5	2	2	1	1	1	58
	-	1	-	-	-	-	-	-	-	-	1
	-	2	2	1	-	-	-	-	-	-	5
	-	1	1	-	-	-	-	-	-	-	2
	<u>153</u>	<u>148</u>	<u>89</u>	<u>45</u>	<u>43</u>	<u>17</u>	<u>17</u>	<u>16</u>	<u>16</u>	<u>16</u>	<u>560</u>
	153	301	390	435	478	495	512	528	544	560	

Table 3.3 - Annual and Cumulative Volumes Over The Rate Stability Period (m3)

<u>Customer Type</u>	<u>Annual Volumes - m3</u>										<u>Total</u>
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	166,816	458,391	666,430	791,189	874,148	932,127	965,127	998,127	1,031,127	1,064,127	7,947,608
Commercial	-	54,500	130,600	168,000	194,600	209,000	216,200	220,900	223,100	225,300	1,642,200
Institutional	-	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	425,000
Agricultural	-	11,100	33,300	45,500	46,600	46,600	46,600	46,600	46,600	46,600	369,500
Industrial	-	50,000	150,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,600,000
Total Volumes	<u>166,816</u>	<u>598,991</u>	<u>1,030,330</u>	<u>1,254,689</u>	<u>1,365,348</u>	<u>1,437,727</u>	<u>1,477,927</u>	<u>1,515,627</u>	<u>1,550,827</u>	<u>1,586,027</u>	<u>11,984,308</u>

<u>Customer Type</u>	<u>Cumulative Volumes - m3</u>										
<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	
Residential	166,816	625,207	1,291,637	2,082,825	2,956,973	3,889,100	4,854,227	5,852,354	6,883,481	7,947,608	
Commercial	-	54,500	185,100	353,100	547,700	756,700	972,900	1,193,800	1,416,900	1,642,200	
Institutional	-	25,000	75,000	125,000	175,000	225,000	275,000	325,000	375,000	425,000	
Agricultural	-	11,100	44,400	89,900	136,500	183,100	229,700	276,300	322,900	369,500	
Industrial	-	50,000	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	
Total Volumes	<u>166,816</u>	<u>765,807</u>	<u>1,796,137</u>	<u>3,050,825</u>	<u>4,416,173</u>	<u>5,853,900</u>	<u>7,331,827</u>	<u>8,847,454</u>	<u>10,398,281</u>	<u>11,984,308</u>	

Table 4.2 - Total Capital Costs At End Of The Rate Stability Period

Total Capital Costs	<u>Year 10</u>

Table 4.3 - Revenue Requirement Over The Rate Stability Period

<u>Project Year</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>
Revenue Requirement											

Closing Rate Base (net of proposed Section 36.2 funding)	<u>Year 10</u>

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 38,450,594
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Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<a href="#">Year 10</a> \$ 68,662
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Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Year 10 Volume (m3)	<a href="#">Year 10</a> \$ 24.24
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Table 6.1 - Distribution Charge

	<a href="#">Project Year</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">3</a>	<a href="#">4</a>	<a href="#">5</a>	<a href="#">6</a>	<a href="#">7</a>	<a href="#">8</a>	<a href="#">9</a>	<a href="#">10</a>	<a href="#">Total</a>
Distribution Revenue	\$	24,944	77,139	121,066	145,338	160,091	170,067	175,698	181,126	186,353	191,579	\$ 1,433,401
SES Revenue		38,368	137,768	236,976	288,578	314,030	330,677	339,923	348,594	356,690	364,786	2,756,391
Total Distribution Charge	\$	<u>63,312</u>	<u>214,907</u>	<u>358,042</u>	<u>433,916</u>	<u>474,121</u>	<u>500,744</u>	<u>515,621</u>	<u>529,721</u>	<u>543,043</u>	<u>556,365</u>	<u>\$ 4,189,792</u>

Table 7.1 - Profitability Index (PI) Inclusive of Section 36.2 Funding

<u>Cash Inflow</u>	<u>Net Present Value</u>	
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
<u>Cash Outflow</u>		
Gross Capital		
Proposed Section 36.2 Funding		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Inclusive of Section 36.2 Funding (C / D)		<u>1.00</u>



Table 7.2 - Profitability Index (PI) Without Section 36.2 Funding

	Net Present Value	
Cash Inflow		
Revenue:		
Distribution Revenue		
System Expansion Surcharge (SES) Revenue		
Total Revenue (A)		
Expenses:		
O&M Expense		
Municipal Tax		
Income Tax		
Total Expenses (B)		
Total Cash Inflow (C = A + B)		
Cash Outflow		
Gross Capital		
Change in Working Capital		
Total Cash Outflow (D)		
Profitability Index (PI) Without Section 36.2 Funding (C / D)		

**Schedule BB3**  
**Enbridge Gas Community Expansion Project Proposal**  
**Wroxeter, Gorrie and Fordwich**

Section 3.4 Wroxeter, Gorrie, Fordwich

Total Forecasted Customers 560 Penetration Rate 58%

	Number of Customers	Current proportion of customer <sup>1</sup>	Estimated Conversion Cost <sup>2</sup>	Estimated Annual Energy Costs (existing fuel)	Estimated Annual Energy Costs (natural gas)	Estimated Annual Savings per customer	Estimated Annual Savings	Estimated Annual GHG per customer - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) per customer switching to natural gas (tCO2e)	Estimated Annual GHG - Total Community - Existing Fuel (tCO2e)	Estimated Annual GHG Change (increased GHG is +ve/decreased GHG is -ve) total community switching to natural gas (tCO2e)
Existing Fuel / Heating Type											
Oil	68	12%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 106,422	6.7	-2.5	451	(171)
Electricity F/A	54	10%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 41,750	0.5	3.6	29	194
Electricity Baseboard	50	9%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 18,277	0.5	3.6	27	178
Propane	325	58%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 119,633	5.2	-1.1	1,685	(344)
Wood	54	10%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	9	2%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	560	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 286,082	12.9	3.6	2,192	(143)

1 Based on completed Market Research for this community. Fuel percentages may not add up to 100% due to rounding error.

2 Based on Market Research gathered information. All of the costs are installed costs, so the cost of new equipment + the cost of having it installed.

	Emission Factors				
	CO2	CH4	N2O	CO2e	Units
Natural Gas	1863 g/m3	0.037 g/m3	0.035 g/m3	0.001874355	tonnes/m3
Heating Oil	2725 g/L	0.006 g/L	0.031 g/L	0.002734388	tonnes/L
Propane	1510 g/L	0.024 g/L	0.108 g/L	0.001542784	tonnes/L
Electricity	30 g/kWh	-	-	0.00003	tonnes/kWh
Wood	-	-	-	-	-

Emission Factor Sources:

Natural gas, heating oil and propane CO2 factors: Guideline for Quantification, Reporting and Verification of GHG Emissions - Ontario Ministry of Environment, Conservation and Parks

Natural gas, heating oil and propane CH4 and N2O factors: Canada's Greenhouse Gas Quantification Requirements, December 2019 - Environment and Climate Change Canada

Electricity factors: 2020 National Inventory Report (Part 3) - Environment and Climate Change Canada (using 2018 consumption intensity for Ontario)

Estimated Annual GHG (tCO2e) = Emission Factors x Consumption Equivalent

Estimated Annual GHG Change (tCO2e) = Estimated Annual GHG For Natural Gas - Estimated Annual GHG For Existing Fuel (tCO2e)

Rate M1 (Community Expansion, Non-FN)					
Consumption Equivalent			Price per Unit		
Gas	m3	2200	Gas (incl. fixed)	\$/m3	0.572
Heating oil	L	2433	Heating oil	\$/L	1.163
Electricity	kWh	18046	Electricity	\$/kWh	0.112
Propane	L	3359	Propane	\$/L	0.484

Notes:

Gas prices correspond to EGI (Union Gas South) April 2020 rates, including 23 cents per m3 SES charge

Heating Oil Prices correspond to the latest available Toronto retail prices (February 2019)

Electricity prices correspond to Hydro One (Med Density - R1) distribution rates implemented January 1, 2020 and includes the new Ontario Electricity Rebate (OER)

The calculated annual savings vs electricity do not reflect the COVID-19 Emergency pricing which is effective for 45 days

South Propane prices correspond to the latest available montly average EDPRO residential rates for Zone 1 (March 2020).

Carbon price is included for all energy types as reported. All costs exclude HST.

**Schedule BB4**  
**Enbridge Gas Community Expansion Project Proposal**  
**Wroxeter, Gorrie and Fordwich**

## Wroxeter, Gorrie and Fordwich Community Expansion Project Pipeline Construction Schedule

[illegible]

**Schedule BB5**  
**Enbridge Gas Community Expansion Project Proposal**  
**Wroxeter, Gorrie and Fordwich**



44816 Harriston Road, RR 1, Gorrie On N0G 1X0  
Tel: 519-335-3208 Fax: 519-335-6208  
[www.howick.ca](http://www.howick.ca)

March 4, 2020

Enbridge  
Att'n: Murray Costello, P. Eng.  
Director, Southeast Operations  
603 Kumpf Drive,  
Waterloo, ON N2J 4A4

Dear Mr. Costello:

**Re: Expression of Support for Natural Gas Expansion to Howick Township**

In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario that are not economically feasible without support. Our municipality is one such area, and we are eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of Howick Township, I would like to formally express our interest to have the Villages of Fordwich, Gorrie and Wroxeter in the Township of Howick included on Enbridge Gas' list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

Based on the draft Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may be required to include support for the proposed project from Band Council(s) and/or local government, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help create jobs and lower monthly costs for our residents.

Yours truly,

Doug Harding, Reeve  
Township of Howick

**Schedule BB6**  
**Enbridge Gas Community Expansion Project Proposal**  
**Wroxeter, Gorrie and Fordwich**





**E.B.C. 290**

**IN THE MATTER OF** the Municipal Franchises  
Act, R.S.O. 1990, c. M.55, as amended;

**AND IN THE MATTER OF** an Application by  
Union Gas Limited for a certificate of public  
convenience and necessity to construct works to  
supply gas to the inhabitants of the Township of  
Howick.

**BEFORE:** G. A. Dominy  
Presiding Member and Vice Chair

J. B. Simon  
Member

### **ORDER GRANTING**

#### **A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY**

Union Gas Limited ("Union") filed with the Ontario Energy Board ("the Board") an Application dated December 18, 1998, ("the Application") under section 8 of the Municipal Franchises Act, R.S.O. 1990, c. M. 55, as amended, for a certificate of public convenience and necessity to construct works to supply gas in the Township of Howick in the County of Huron. The Application was assigned file number E.B.C. 290.

Union served and published the Board's Notices of Application and Notices of Written Hearing. The Board has considered the submissions of Board staff and Union in this matter. The Board finds the Application to be in the public interest.


- 2 -

**THEREFORE, THE BOARD ORDERS THAT:**

1. A Certificate of Public Convenience and Necessity is granted to Union to construct works to supply gas in the Township of Howick.
2. If Union fails to substantially complete construction of the gas mains proposed in the Application within twenty-four months following the issuance of the Board's certificate, the Certificate shall expire.
3. Construction of the gas works proposed in the evidence supporting the Application is subject to the Undertakings listed in Appendix "A" attached to this Order.
4. Union is directed to pay the Board's costs of and incidental to these proceedings , immediately upon receipt of the Board's invoice.

**DATED** at Toronto June 9, 1999.

ONTARIO ENERGY BOARD



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Peter H. O'Dell  
Assistant Board Secretary

APPENDIX 'A' TO  
BOARD ORDER NO. E.B.C. 290

DATED June 9, 1999.



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Peter H. O'Dell  
Assistant Board Secretary