

Schedule NNNN
Enbridge Gas Community Expansion Project Proposal
Township of Alberton

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Township of Alberton 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 extend service within the Township of Alberton. The proposed facilities will provide access to natural gas to a forecasted 72 customers (67 residential, 3 commercial / institutional and 2 industrial).

The proposed project will tie-in to an existing 4" polyethylene pipe along _____ between _____ and _____. There will be a second tie-in to an existing 2" polyethylene pipe near the intersection of _____ and _____.

The first segment of the proposed facilities will run _____ along _____ to _____, providing service to _____, and then further _____ to provide service to _____ and _____. The second segment will run _____ along _____ from the intersection of _____ and _____ to partially continue _____ on _____ along _____.

A summary of proposed distribution piping is listed below:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	16,100
Polyethylene	4	8,300

Please refer to Schedule NNNN1 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 NNNN2, Table 3.2.

3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule NNNN2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule NNNN3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule NNNN4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule NNNN5.</p>

3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule NNNN6 for Enbridge's CPCN for the Township of Alberton (EBC 151) which covers the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 NNNN2, 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 NNNN2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$9,895,573</p> <p>Please refer to Schedule NNNN2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$137,439</p> <p>Please refer to Schedule NNNN2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$27.91</p> <p>Please refer to Schedule NNNN2, Table 5.3.</p>

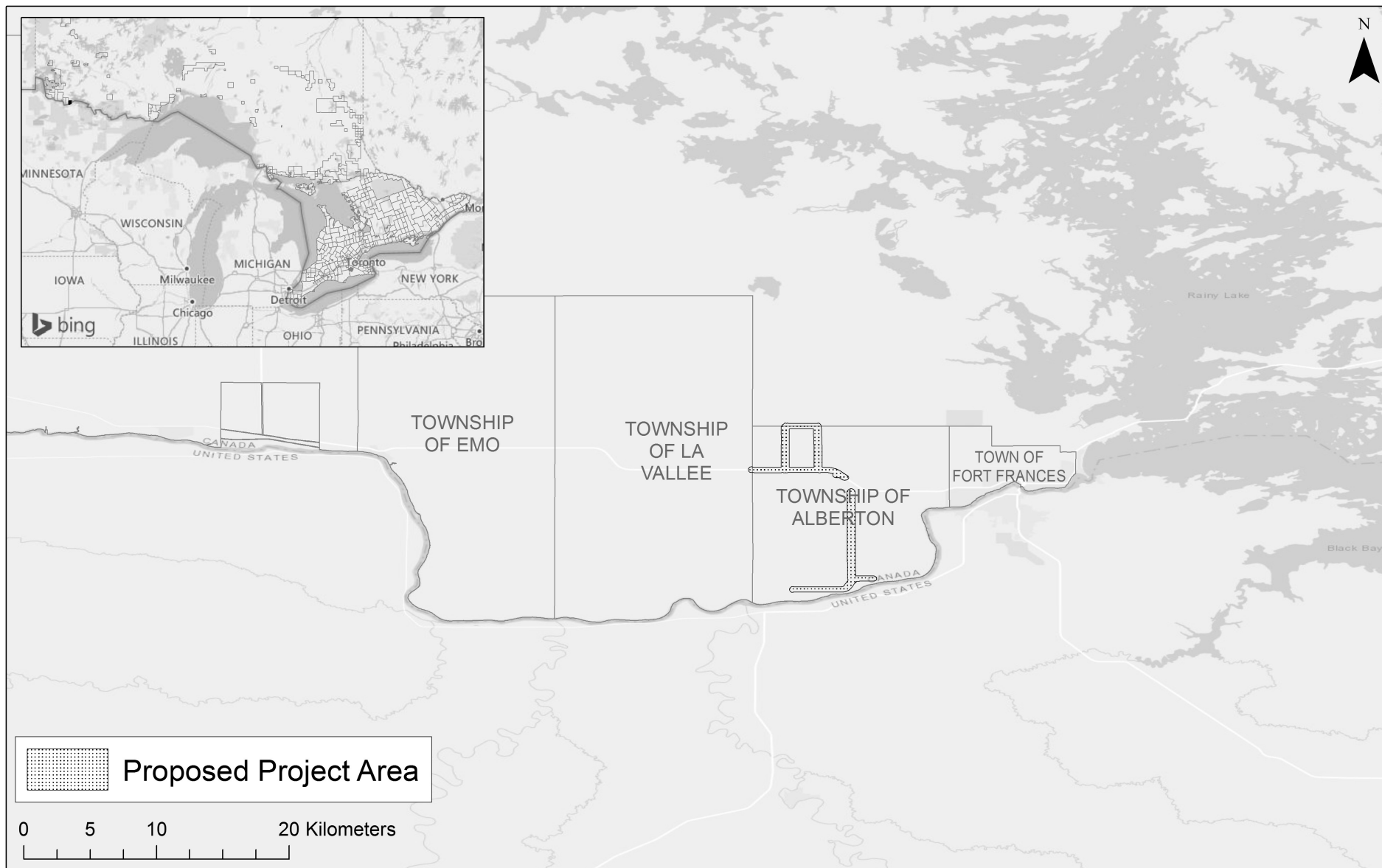
Part VI – Distribution Charge	
6.1	<p>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule NNNN2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule NNNN2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule NNNN2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule NNNN4.</p>

Schedule NNNN1
Enbridge Gas Community Expansion Project Proposal
Township of Alberton

Township of Alberton



Schedule NNNN2
Enbridge Gas Community Expansion Project Proposal
Township of Alberton

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>
	21	15	10	5	5	3	2	2	2	2	67
	-	2	1	-	-	-	-	-	-	-	3
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	1	1	-	-	-	-	-	-	-	2
	<u>21</u>	<u>18</u>	<u>12</u>	<u>5</u>	<u>5</u>	<u>3</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>72</u>
	21	39	51	56	61	64	66	68	70	72	

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>
	23,100	62,700	90,200	106,700	117,700	126,500	132,000	136,400	140,800	145,200	1,081,300
	-	3,600	8,300	9,400	9,400	9,400	9,400	9,400	9,400	9,400	77,700
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	50,000	150,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,600,000
	<u>23,100</u>	<u>116,300</u>	<u>248,500</u>	<u>316,100</u>	<u>327,100</u>	<u>335,900</u>	<u>341,400</u>	<u>345,800</u>	<u>350,200</u>	<u>354,600</u>	<u>2,759,000</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>	
	23,100	85,800	176,000	282,700	400,400	526,900	658,900	795,300	936,100	1,081,300	
	-	3,600	11,900	21,300	30,700	40,100	49,500	58,900	68,300	77,700	
	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	
	-	50,000	200,000	400,000	600,000	800,000	1,000,000	1,200,000	1,400,000	1,600,000	
	<u>23,100</u>	<u>139,400</u>	<u>387,900</u>	<u>704,000</u>	<u>1,031,100</u>	<u>1,367,000</u>	<u>1,708,400</u>	<u>2,054,200</u>	<u>2,404,400</u>	<u>2,759,000</u>	

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

Total Capital Costs

Year 10

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>

Year 10

Closing Rate Base (net of proposed Section 36.2 funding)
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Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 9,895,573
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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> \$ 137,439
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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> \$ 27.91
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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	\$	4,865	17,610	31,858	39,383	41,700	43,553	44,711	45,638	46,565	47,491	\$ 363,374
SES Revenue		5,313	26,749	57,155	72,703	75,233	77,257	78,522	79,534	80,546	81,558	634,570
Total Distribution Charge	\$	<u>10,178</u>	<u>44,359</u>	<u>89,013</u>	<u>112,086</u>	<u>116,933</u>	<u>120,810</u>	<u>123,233</u>	<u>125,172</u>	<u>127,111</u>	<u>129,049</u>	<u>\$ 997,944</u>

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

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)

Net Present Value

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 NNNN3
Enbridge Gas Community Expansion Project Proposal
Township of Alberton

Section 3.4 Township of Alberton

Total Forecasted Customers 72 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	15	21%	\$ 5,000	\$ 2,787	\$ 1,495	\$ 1,292	\$ 19,536	6.6	-2.4	99	(37)
Electricity F/A	6	9%	\$ 5,000	\$ 1,998	\$ 1,495	\$ 503	\$ 3,259	0.5	3.6	3	23
Electricity Baseboard	9	12%	\$ 12,000	\$ 1,998	\$ 1,495	\$ 503	\$ 4,345	0.5	3.6	5	31
Propane	32	44%	\$ 600	\$ 1,611	\$ 1,495	\$ 116	\$ 3,683	5.1	-1.0	162	(31)
Wood	6	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	4	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	72	100%	\$ 31,100	\$ 8,395	\$ 5,981	\$ 2,414	\$ 30,823	12.7	3.8	269	(14)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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.

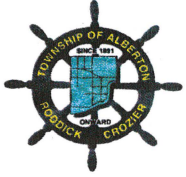
Carbon price is included for all energy types as reported. All costs exclude HST.

Schedule NNNN4
Enbridge Gas Community Expansion Project Proposal
Township of Alberton

Township of Alberton Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule NNNN5
Enbridge Gas Community Expansion Project Proposal
Township of Alberton



The Corporation of the Township of Alberton

Corner of Hwy 11/71 & Hwy 611 South - Mailing Address: RR #1 – B2, 3 Hwy 611 S, Fort Frances, Ontario, P9A 3M2

Telephone: 807-274-6053
Fax: 807-274-8449
e-mail: alberton@jam21.net
website: www.alberton.ca

May 13, 2020

Enbridge Gas Inc.
36 Charles Street
North Bay, Ontario
P1B 8K7

ATTENTION: MR. LUKE SKAARUP
Director, Northern Region Operations

Dear Sir:

Re: Expression of Support for Natural Gas Expansion in Alberton, Ontario

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. The Township of Alberton is one such area, and Alberton Council is eager to bring this affordable, reliable fuel source to our residents and businesses.

On behalf of Council for the Township of Alberton, I would like to formally express our interest to have the *Alberton Natural Gas Expansion Initiative* included in the list of projects being proposed by Enbridge Gas 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), I confirm that Council is aware that Enbridge Gas Inc. may be required to include confirmation of support for the proposed project from Band Councils(s) and/or local governments, as applicable, demonstrated through a written expression of support and/or a commitment to financial support in its project submissions.

Alberton Council previously demonstrated its support and commitment for expansion by passing Resolution #2017-99, a copy of which is attached. Current Council has confirmed its continuing support in this regard, as is evidenced by Resolution #2020-121, a copy of which is attached.

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

Thank you for your time.

Yours truly,

Mike Ford, Reeve



THE CORPORATION OF THE TOWNSHIP OF ALBERTON

Session Date: May 10, 2017

Resolution No.: 2017-99

Moved By: [Signature]

Seconded By: [Signature]

BE IT RESOLVED THAT:

WHEREAS the Province has announced the launch of the \$100 million *Natural Gas Grant Program* to help expand natural gas access to more communities in Ontario;

AND WHEREAS the purpose of the *Natural Gas Grant Program* is to help improve energy affordability and support economic development, including for farms and agribusinesses in rural Ontario, by helping build new natural gas infrastructure;

NOW THEREFORE Council for the Township of Alberton hereby confirms that it is supportive of projects to provide expansion of access to natural gas throughout the municipality, irrespective of the distributor or supplier proposing to do so;

AND FURTHER THAT, subject to potential reversal of this decision by the municipal Council to be elected in 2018 should such expansion project not be approved and commenced prior to the 2018 elected members of Council taking office in 2018, Council for the Township of Alberton hereby:

1. undertakes to make a financial contribution to any natural gas expansion project in the Township of Alberton that is approved by the Ontario Energy Board under the *Natural Gas Grant Program*, which financial contribution will be, at a minimum, equivalent to the property tax that otherwise would be paid to the Township on the new natural gas infrastructure built under the *Natural Gas Grant Program*; and
2. confirms that such financial contribution would continue for a period of 10 years beginning on the date that property taxes in respect of such new natural gas infrastructure would normally first become due to the Township.

Pecuniary Interest	Recorded Vote	Council Member	Nay	Yea
		HAMMOND, Mike		
		FORD, Mike		
		JOHNSON, Jennifer		
		SPUZAK, Peter		
		WOODS, Wayne		

[Signature]
REEVE

CARRIED: ☒

DEFEATED: ☐



THE CORPORATION OF THE TOWNSHIP OF ALBERTON

Session Date: May 13, 2020

Resolution No.: 2020 - 121

Moved By: "DIANE GLOWASKI"

Seconded By: "JENNIFER JOHANSON"

BE IT RESOLVED THAT:

WHEREAS the Province of Ontario has announced plans to further increase access to natural gas by making financial support available for new expansion projects;

AND WHEREAS the *Natural Gas Expansion Program* offers an opportunity to drive economic development and enhance the quality of life and prosperity of families and businesses in Ontario;

AND WHEREAS Council is aware that a municipal contribution to the project, being an amount equivalent to the municipal portion of property taxes that would be imposed on the new infrastructure being built for a period of ten years from the date of construction, will demonstrate Council's support for the proposed expansion project;

NOW THEREFORE Council for the Township of Alberton confirms its continued support for expansion of natural gas services in the Township of Alberton;

AND FURTHER THAT Reeve Mike Ford is hereby to sign a letter to Enbridge on behalf of Council in the form attached, and that same be submitted by the Township to the Enbridge Northern Region Operations Director to enable the Director to submit to the Ontario Energy Board a gas expansion project proposal in the Township of Alberton;

AND FURTHER THAT Council for the Township of Alberton hereby confirms that it confirms and continues Resolution #2017-99 passed by former Alberton Council on May 10, 2017 to waive municipal taxes on the expansion for a period of ten years, a copy of which is attached.

Pecuniary Interest	Recorded Vote	Council Member	Nay	Yea
	✓	FORD, Mike		✓
	✓	GLOWASKY, Diane		✓
	✓	JOHANSON, Jennifer		✓
	✓	SPENCE, Shawn		✓
	✓	SPUZAK, Peter		✓


REEVE

CARRIED: ☒

DEFEATED: ☐

Schedule NNNN6
Enbridge Gas Community Expansion Project Proposal
Township of Alberton



IN THE MATTER OF THE Municipal Franchises Act, R.S.O. 1980, 309, Section 8 and amendments thereto;

AND IN THE MATTER OF an application by Inter-City Gas Corporation for a Certificate of Public Convenience and Necessity to construct works to supply gas and to supply gas to the inhabitants of the Corporation of the Township of Alberton in the District of Rainy River.

BEFORE:	O. J. Cook)	
	Presiding Member)	
)	
	C. A. Wolf Jr.)	July 14, 1987
	Member)	
)	
	C. U. Craddock)	
	Member)	

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

UPON the application of Inter-City Gas Corporation ("Inter-City") dated October 17, 1984, (the "Application") to the Ontario Energy Board (the "Board") for a Certificate of Public Convenience and Necessity to construct works to supply gas and to supply gas in certain parts of the Corporation of the Township of Alberton ("Alberton");

AND UPON a Notice of Franchise and Certificate Application and Hearing having been published in the Fort Frances Times, and served on the Clerk of Alberton and the present customers, and an answer having been filed by the solicitor for Alberton;

AND UPON the Application having been heard in Toronto on April 30, 1987, and July 14, 1987, in the presence of counsel for Inter-City and for ICG Utilities (Ontario) Ltd and Special Counsel for Board Staff, no one else appearing;

AND UPON THE BOARD having delivered an oral decision at the conclusion of the hearing and finding that the public convenience and necessity requires that approval be given to Inter-City to construct works to supply gas and to supply gas in certain parts of Alberton;

IT IS THEREFORE ORDERED THAT:

1. This Certificate of Public Convenience and Necessity is granted to Inter-City to construct works to supply gas and to supply gas in certain parts of the Corporation of the Township of Alberton.

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2. The Board's costs shall be paid by Inter-City as soon as these have been fixed.

ISSUED at Toronto this 5th day of October, 1987.

ONTARIO ENERGY BOARD

A handwritten signature in dark ink, appearing to read "P. O'Dell", is written over a horizontal line.

Peter H. O'Dell
Acting Board Secretary

Schedule OOOO
Enbridge Gas Community Expansion Project Proposal
Ameliasburgh and Rossmore

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Ameliasburgh and Rossmore 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service to the communities of Ameliasburgh and Rossmore within the single-tier municipality Prince Edward County. The proposed pipeline system will provide natural gas to a forecasted 778 customers (742 residential, 29 commercial / institutional, 1 intensive agricultural and 6 industrial).

The proposed tie-in point will be near the intersection of _____ and _____ connecting to an existing 3" steel pipeline. The proposed distribution pipeline will consist of 27,900 m of 2" polyethylene pipe, 4,700 m of 4" polyethylene pipe and 18,700 m of 4" steel pipe.

The proposed distribution system extends _____ on _____ to _____ and then along _____ to _____ and include part of _____ and branch on to _____, _____ and _____ to _____ to _____, _____, _____, _____, _____, _____ and _____.

Two reinforcement segments (13,000 m of 6" steel pipe in one segment and 1,600 m of 6" steel pipe in another segment) are required to accommodate additional loads for the system.

5 new distribution stations are required in addition to modifications required for an existing medium size station. The first station will be located near the intersection of _____ and _____. The second station will be located at the intersection of _____ and _____. The third station will be located at the intersection of _____ and _____. The fourth station will be located at the intersection of _____ and _____. The fifth station will be located at the intersection of _____ and _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	27,900

The approximate length and size of the reinforcement required:

Pipe Type	Diameter (NPS)	Length (m)
Steel	6	13,000
Steel	6	1,600

	<p>The approximate length and size of the supply laterals required:</p> <table><tr><td>Pipe Type</td><td>Diameter (NPS)</td><td>Length (m)</td></tr><tr><td>Polyethylene</td><td>4</td><td>4,700</td></tr><tr><td>Steel</td><td>4</td><td>18,700</td></tr></table> <p>Please refer to Schedule OOOO1 for Project Map.</p>	Pipe Type	Diameter (NPS)	Length (m)	Polyethylene	4	4,700	Steel	4	18,700
Pipe Type	Diameter (NPS)	Length (m)								
Polyethylene	4	4,700								
Steel	4	18,700								
3.2	<p>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.</p> <p>Please refer to Schedule OOOO2, Table 3.2.</p>									
3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule OOOO2, Table 3.3.</p>									
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule OOOO3, Table 3.4.</p>									

3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule OOOO4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule OOOO5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule OOOO6 for Enbridge's CPCN for Prince Edward County (RP-2003-0175 / EB-2003-0217) which covers the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</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 OOOO2, 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 OOOO2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$38,840,800</p> <p>Please refer to Schedule OOOO2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$49,924</p> <p>Please refer to Schedule OOOO2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$15.97</p> <p>Please refer to Schedule OOOO2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule OOOO2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule OOOO2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule OOOO2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule OOOO4.</p>

Schedule OOOO1
Enbridge Gas Community Expansion Project Proposal
Ameliasburgh and Rossmore

Ameliasburgh, Rossmore



Schedule OOOO2
Enbridge Gas Community Expansion Project Proposal
Ameliasburgh and Rossmore

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>
	228	171	114	57	57	23	23	23	23	23	742
	-	16	6	3	2	-	-	-	-	-	27
	-	2	-	-	-	-	-	-	-	-	2
	-	1	-	-	-	-	-	-	-	-	1
	-	4	2	-	-	-	-	-	-	-	6
	<u>228</u>	<u>194</u>	<u>122</u>	<u>60</u>	<u>59</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>778</u>
	228	422	544	604	663	686	709	732	755	778	

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	250,800	689,700	1,003,200	1,191,300	1,316,700	1,404,700	1,455,300	1,505,900	1,556,500	1,607,100	11,981,200
Commercial	-	38,800	89,500	106,100	113,000	115,200	115,200	115,200	115,200	115,200	923,400
Institutional	-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
Agricultural	-	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	85,000
Industrial	-	200,000	500,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	4,900,000
Total Volumes	<u>250.800</u>	<u>983.500</u>	<u>1,702.700</u>	<u>2,007.400</u>	<u>2,139.700</u>	<u>2,229.900</u>	<u>2,280.500</u>	<u>2,331.100</u>	<u>2,381.700</u>	<u>2,432.300</u>	<u>18,739.600</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	250,800	940,500	1,943,700	3,135,000	4,451,700	5,856,400	7,311,700	8,817,600	10,374,100	11,981,200	
Commercial	-	38,800	128,300	234,400	347,400	462,600	577,800	693,000	808,200	923,400	
Institutional	-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000	
Agricultural	-	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000	
Industrial	-	200,000	700,000	1,300,000	1,900,000	2,500,000	3,100,000	3,700,000	4,300,000	4,900,000	
Total Volumes	<u>250.800</u>	<u>1,234.300</u>	<u>2,937.000</u>	<u>4,944.400</u>	<u>7,084.100</u>	<u>9,314.000</u>	<u>11,594.500</u>	<u>13,925.600</u>	<u>16,307.300</u>	<u>18,739.600</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	\$ 38,840,800
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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> \$ 49,924
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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> \$ 15.97
---	--

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	52,819	171,083	272,424	322,344	350,036	369,033	379,689	390,345	401,002	411,658	\$ 3,120,434
SES Revenue		57,684	226,205	391,621	461,702	492,131	512,877	524,515	536,153	547,791	559,429	4,310,108
Total Distribution Charge	\$	<u>110,503</u>	<u>397,288</u>	<u>664,045</u>	<u>784,046</u>	<u>842,167</u>	<u>881,910</u>	<u>904,204</u>	<u>926,498</u>	<u>948,793</u>	<u>971,087</u>	<u>\$ 7,430,542</u>

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

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)

Net Present Value

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 OOOO3
Enbridge Gas Community Expansion Project Proposal
Ameliasburgh and Rossmore

Section 3.4 Ameliasburgh and Rossmore

Total Forecasted Customers 778 Penetration Rate 65%

	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	163	21%	\$ 5,000	\$ 2,787	\$ 1,495	\$ 1,292	\$ 211,101	6.6	-2.4	1,071	(397)
Electricity F/A	70	9%	\$ 5,000	\$ 1,998	\$ 1,495	\$ 503	\$ 35,211	0.5	3.6	37	251
Electricity Baseboard	93	12%	\$ 12,000	\$ 1,998	\$ 1,495	\$ 503	\$ 46,948	0.5	3.6	50	335
Propane	342	44%	\$ 600	\$ 1,611	\$ 1,495	\$ 116	\$ 39,799	5.1	-1.0	1,748	(336)
Wood	70	9%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	39	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	778	100%	\$ 31,100	\$ 8,395	\$ 5,981	\$ 2,414	\$ 333,059	12.7	3.8	2,906	(147)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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 OOOO4
Enbridge Gas Community Expansion Project Proposal
Ameliasburgh and Rossmore

Ameliasburgh and Rossmore Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule OOOO5
Enbridge Gas Community Expansion Project Proposal
Ameliasburgh and Rossmore



Chief Administrative Officer

The Corporation of the County of Prince Edward
Office: 332 Picton Main Street, Picton, ON K0K 2T0
Mailing: 332 Picton Main Street, Picton, ON K0K 2T0
T: 613.476.2148 x 1003 | F: 613.476-476-5727
mwallace@pecounty.on.ca | www.thecounty.ca

May 25, 2020

Dear REGIONAL DIRECTOR,

Re: Expression of Support for Natural Gas Expansion to Rossmore, Prince Edward County

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 County of Prince Edward, I would like to formally express our interest to have Rossmore Natural Gas Expansion 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. The Corporation of the County of Prince Edward supports this project moving forward.

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,

Marcia Wallace, PhD, RPP
Chief Administrative Officer



Chief Administrative Officer

The Corporation of the County of Prince Edward
Office: 332 Picton Main Street, Picton, ON K0K 2T0
Mailing: 332 Picton Main Street, Picton, ON K0K 2T0
T: 613.476.2148 x 1003 | F: 613.476-476-5727
mwallace@pecounty.on.ca | www.thecounty.ca

June 30, 2020

Dear Regional Director,

Re: Expression of Support for Natural Gas Expansion to Cherry Valley, Ameliasburgh and Consecon, Prince Edward County

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 County of Prince Edward, I would like to formally express our interest to have Cherry Valley Natural Gas Expansion, Ameliasburgh Natural Gas Expansion and Consecon Natural Gas Expansion 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. The Corporation of the County of Prince Edward supports this project moving forward.

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,

Sincerely,

Marcia Wallace, PhD, RPP
Chief Administrative Officer

Schedule OOOO6
Enbridge Gas Community Expansion Project Proposal
Ameliasburgh and Rossmore

Ontario Energy
Board

Commission de l'Énergie
de l'Ontario



RP-2003-0175

EB-2003-0217

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

County of Prince Edward.

This the certificates replaces the certificates of the former municipalities that are now within the geographic area of the County of Prince Edward.

DATED at Toronto, October 17, 2003

ONTARIO ENERGY BOARD

Paul B. Pudge
Assistant Secretary

Schedule PPPP
Enbridge Gas Community Expansion Project Proposal
Benmiller (Ashfield-Colborne-Wawanosh)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Benmiller (Ashfield-Colborne-Wawanosh) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent's Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the community of Benmiller within the Township of Ashfield-Colborne-Wawanosh. The proposed facilities will provide access to natural gas to a forecasted 62 customers (55 residential, 6 commercial / institutional and 1 industrial).

The proposed tie-in point will be near the intersection of _____ and _____ connecting to an existing 4" polyethylene pipeline. The proposed distribution pipeline will consist of 3,480 m of 2" polyethylene pipe and 7,210 m of 4" polyethylene pipe. The proposed distribution system will extend _____ via _____ to _____, _____, _____, _____, _____, _____, _____ and _____.

There will be no reinforcement required to accommodate additional loads for the system. An existing station requires upsizing.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	3,480

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	7,210

Please refer to Schedule PPPP1 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 PPPP2, Table 3.2.

3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule PPPP2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule PPPP3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule PPPP4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule PPPP5.</p>

3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule PPPP6 for Enbridge's CPCN for the Township of Ashfield-Colborne-Wawanosh (RP-2002-0117 / EB-2002-0327) which covers the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 PPPP2, 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 PPPP2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$5,733,161</p> <p>Please refer to Schedule PPPP2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$92,470</p> <p>Please refer to Schedule PPPP2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$23.80</p> <p>Please refer to Schedule PPPP2, Table 5.3.</p>

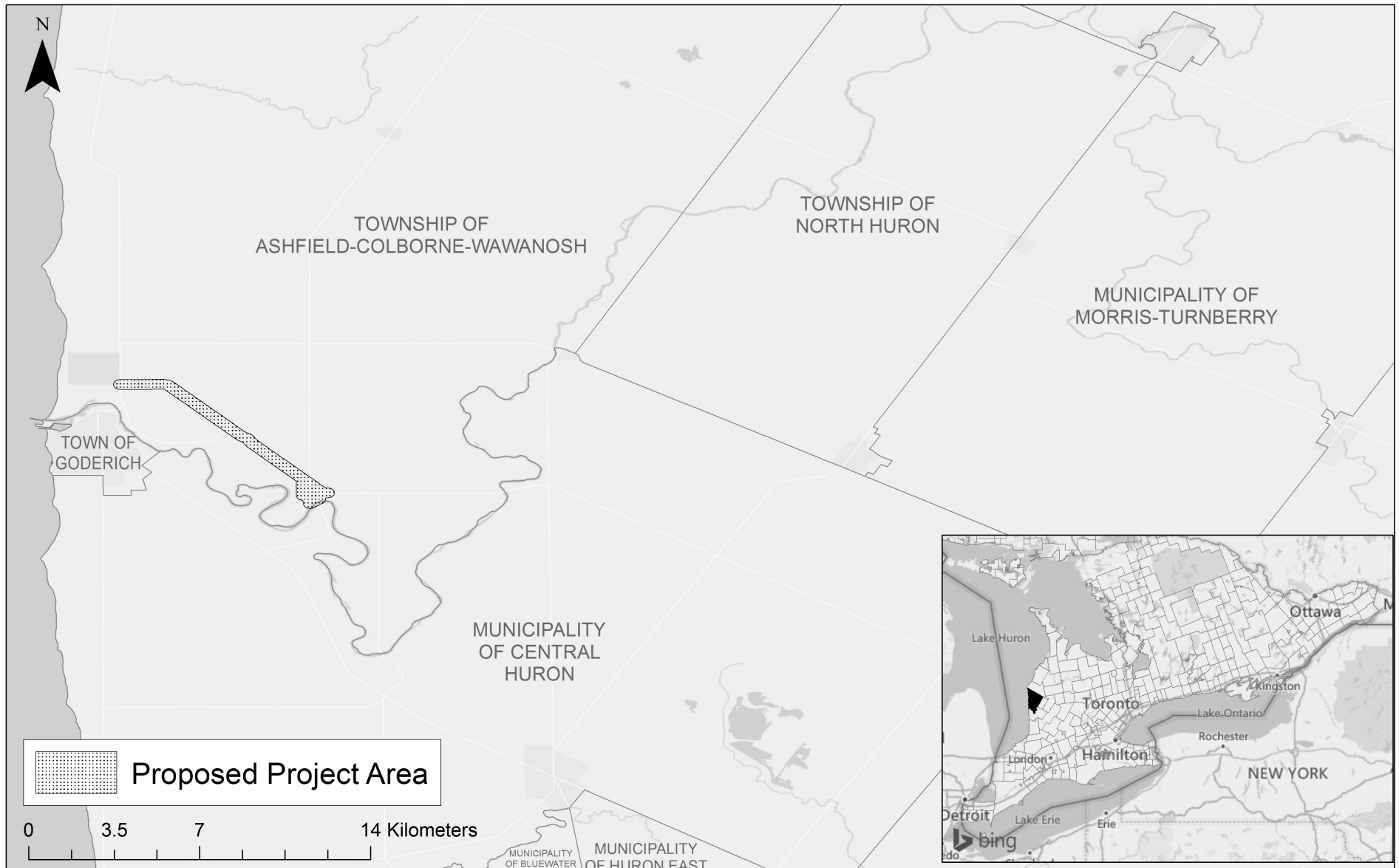
Part VI – Distribution Charge	
6.1	<p>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule PPPP2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule PPPP2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule PPPP2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule PPPP4.</p>

Schedule PPPP1
Enbridge Gas Community Expansion Project Proposal
Benmiller (Ashfield-Colborne-Wawanosh)

Benmiller



Schedule PPPP2
Enbridge Gas Community Expansion Project Proposal
Benmiller (Ashfield-Colborne-Wawanosh)

Table 3.2 - Customer Attachments Over The Rate Stability Period

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

Project Year	1	2	3	4	5	6	7	8	9	10	Total
	17	11	9	6	4	2	2	2	1	1	55
	-	3	2	-	-	-	-	-	-	-	5
	-	-	-	-	-	-	-	-	-	-	-
	-	1	-	-	-	-	-	-	-	-	1
	-	1	-	-	-	-	-	-	-	-	1
	17	16	11	6	4	2	2	2	1	1	62
	17	33	44	50	54	56	58	60	61	62	

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

Customer Type
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

Project Year	1	2	3	4	5	6	7	8	9	10	Total
	18,700	49,500	71,500	88,000	99,000	105,600	110,000	114,400	117,700	119,900	894,300
	-	3,300	8,800	11,000	11,000	11,000	11,000	11,000	11,000	11,000	89,100
	-	-	-	-	-	-	-	-	-	-	-
	-	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	85,000
	-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
	18,700	107,800	190,300	209,000	220,000	226,600	231,000	235,400	238,700	240,900	1,918,400

Customer Type
Residential
Commercial
Institutional
Agricultural
Industrial
Total Volumes

Project Year	1	2	3	4	5	6	7	8	9	10
	18,700	68,200	139,700	227,700	326,700	432,300	542,300	656,700	774,400	894,300
	-	3,300	12,100	23,100	34,100	45,100	56,100	67,100	78,100	89,100
	-	-	-	-	-	-	-	-	-	-
	-	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000
	-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000
	18,700	126,500	316,800	525,800	745,800	972,400	1,203,400	1,438,800	1,677,500	1,918,400

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

Total Capital Costs

Year 10

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Revenue Requirement

Project Year	1	2	3	4	5	6	7	8	9	10	Total
--------------	---	---	---	---	---	---	---	---	---	----	-------

Year 10

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 \$ 5,733,161

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served \$ Year 10
92,470

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

Section 36.2 Funding Amount Per Year 10 Volume (m3) \$ Year 10
23.80

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	\$	2,776	9,891	16,025	18,801	20,435	21,415	22,068	22,721	23,211	23,538	\$ 180,881
SES Revenue		<u>4,301</u>	<u>24,794</u>	<u>43,769</u>	<u>48,070</u>	<u>50,600</u>	<u>52,118</u>	<u>53,130</u>	<u>54,142</u>	<u>54,901</u>	<u>55,407</u>	<u>441,232</u>
Total Distribution Charge	\$	<u>7,077</u>	<u>34,685</u>	<u>59,794</u>	<u>66,871</u>	<u>71,035</u>	<u>73,533</u>	<u>75,198</u>	<u>76,863</u>	<u>78,112</u>	<u>78,945</u>	<u>\$ 622,113</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 PPPP3
Enbridge Gas Community Expansion Project Proposal
Benmiller (Ashfield-Colborne-Wawanosh)

Section 3.4 Benmiller (Ashfield-Colborne-Wawanosh)

Total Forecasted Customers 62 Penetration Rate 70%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	11	17%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 16,697	6.7	-2.5	71	(27)
Electricity F/A	4	6%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 2,729	0.5	3.6	2	13
Electricity Baseboard	0	0%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ -	0.5	3.6	-	-
Propane	41	66%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 14,990	5.2	-1.1	211	(43)
Wood	4	6%	\$ 3,500	N/A	N/A	\$ -	N/A	N/A	N/A	N/A	N/A
Other	4	6%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	62	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 34,417	12.9	3.6	284	(57)

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 PPPP4
Enbridge Gas Community Expansion Project Proposal
Benmiller (Ashfield-Colborne-Wawanosh)

Benmiller Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule PPPP5
Enbridge Gas Community Expansion Project Proposal
Benmiller (Ashfield-Colborne-Wawanosh)

May 21, 2020

Steven Jelich
Director, Southwest Region Operations
Enbridge Gas Inc.
109 Commissioners Rd W.
London, ON N6A 4P1

Dear Mr. Jelich:

Re: Expression of Support for Natural Gas Expansion to The Township of Ashfield-Colborne-Wawanosh/ Benmiller, Dungannon, and Port Albert areas.

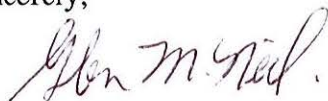
In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario 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 Ashfield-Colborne-Wawanosh, I would like to formally express our interest to have Benmiller, Dungannon, and Port Albert 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 (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,



Glen McNeil,
Mayor
Township of Ashfield-Colborne-Wawanosh

Schedule PPPP6
Enbridge Gas Community Expansion Project Proposal
Benmiller (Ashfield-Colborne-Wawanosh)

RP-2002-0117
EB-2002-0327

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 Ashfield-Colborne-Wawanosh

(excluding Lot 1 Concession 2,3,4 and 5 East Division, Lot 1 in Concession 2 and 3 West Division and Lots 1, 2, 3 and 4 in Concessions 4 and 5 West Division).

This certificate replaces the certificate of the former Township of Colborne that is now within the Township of Ashfield-Colborne-Wawanosh.

DATED at Toronto, September 22, 2004.

ONTARIO ENERGY BOARD


John Zych
Board Secretary

Schedule QQQQ
Enbridge Gas Community Expansion Project Proposal
Dungannon (Ashfield-Colborne-Wawanosh)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Dungannon (Ashfield-Colborne-Wawanosh) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the community of Dungannon within the Township of Ashfield-Colborne-Wawanosh. The proposed facilities will provide access to natural gas to a forecasted 182 customers (140 residential, 25 commercial / institutional, 14 agricultural intensive and 3 industrial).

The proposed project will tie-in to an existing 4" polyethylene pipe on _____. Proposed facilities will run from the intersection of _____ and _____ (within the Township of North Huron), _____ along _____ to _____, _____, _____, _____, _____, _____, _____ and _____.

A reinforcement segment (3,250 m of 10" steel pipe) is required to accommodate additional loads on the distribution system. The proposed reinforcement will start on _____ approximately _____ and end near the intersection of _____ and _____ within the Municipality of Huron East.

In addition, a new medium-size distribution station is required at the tie-in point.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	21,100
Polyethylene	4	1,000
Steel	4	17,600

The approximate length and size of the reinforcement pipeline required:

Pipe Type	Diameter (NPS)	Length (m)
Steel	10	3,250

Please refer to Schedule QQQQ1 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 QQQQ2, Table 3.2.

3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule QQQQ2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule QQQQ3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule QQQQ4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule QQQQ5.</p>

3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule QQQQ6 for Enbridge's CPCNs for the Township of Ashfield-Colborne-Wawanosh (RP-2002-0117 / EB-2002-0327), the Township of North Huron (EB-2015-0169) and the Municipality of Huron East (EB-2013-0372) which cover the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 QQQQ2, 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 QQQQ2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$27,648,393</p> <p>Please refer to Schedule QQQQ2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$151,914</p> <p>Please refer to Schedule QQQQ2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$28.40</p> <p>Please refer to Schedule QQQQ2, Table 5.3.</p>

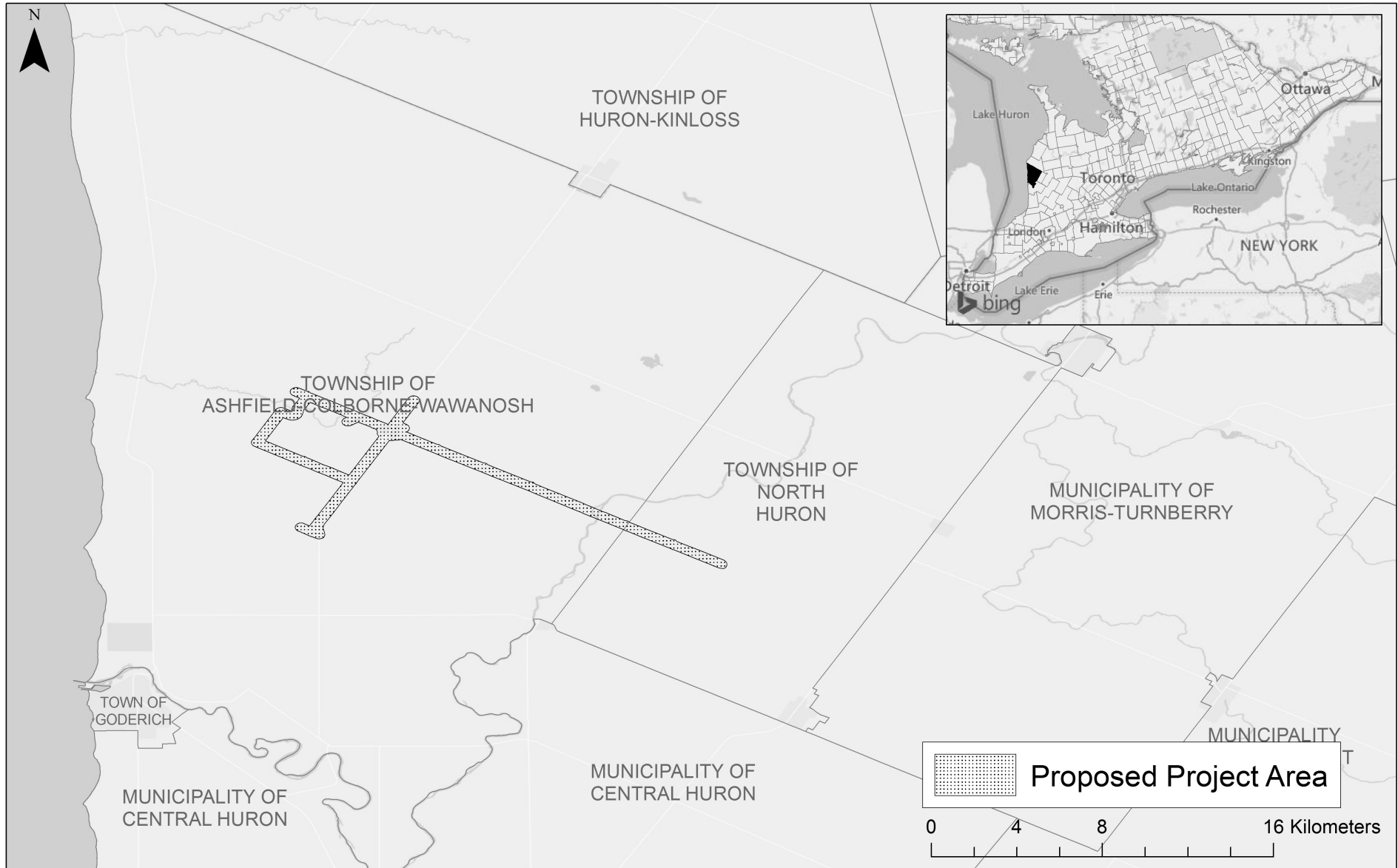
Part VI – Distribution Charge	
6.1	<p>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule QQQQ2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule QQQQ2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule QQQQ2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule QQQQ4.</p>

Schedule QQQQ1
Enbridge Gas Community Expansion Project Proposal
Dungannon (Ashfield-Colborne-Wawanosh)

Dungannon



Schedule QQQQ2
Enbridge Gas Community Expansion Project Proposal
Dungannon (Ashfield-Colborne-Wawanosh)

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>
	38	32	13	9	7	9	8	9	8	7	140
	-	13	3	3	1	1	1	1	1	1	25
	-	-	-	-	-	-	-	-	-	-	-
	-	10	3	1	-	-	-	-	-	-	14
	-	2	1	-	-	-	-	-	-	-	3
	<u>38</u>	<u>57</u>	<u>20</u>	<u>13</u>	<u>8</u>	<u>10</u>	<u>9</u>	<u>10</u>	<u>9</u>	<u>8</u>	<u>182</u>
	38	95	115	128	136	146	155	165	174	182	

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	41,800	118,800	168,300	192,500	210,100	227,700	246,400	265,100	283,800	300,300	2,054,800
Commercial	-	19,600	43,900	53,300	59,100	61,300	63,500	65,700	67,900	70,100	504,400
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	143,300	293,800	302,100	303,200	303,200	303,200	303,200	303,200	303,200	2,558,400
Industrial	-	100,000	250,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	2,450,000
Total Volumes	<u>41,800</u>	<u>381,700</u>	<u>756,000</u>	<u>847,900</u>	<u>872,400</u>	<u>892,200</u>	<u>913,100</u>	<u>934,000</u>	<u>954,900</u>	<u>973,600</u>	<u>7,567,600</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	41,800	160,600	328,900	521,400	731,500	959,200	1,205,600	1,470,700	1,754,500	2,054,800	
Commercial	-	19,600	63,500	116,800	175,900	237,200	300,700	366,400	434,300	504,400	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	143,300	437,100	739,200	1,042,400	1,345,600	1,648,800	1,952,000	2,255,200	2,558,400	
Industrial	-	100,000	350,000	650,000	950,000	1,250,000	1,550,000	1,850,000	2,150,000	2,450,000	
Total Volumes	<u>41,800</u>	<u>423,500</u>	<u>1,179,500</u>	<u>2,027,400</u>	<u>2,899,800</u>	<u>3,792,000</u>	<u>4,705,100</u>	<u>5,639,100</u>	<u>6,594,000</u>	<u>7,567,600</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	\$ 27,648,393
--	---------------

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<u>Year 10</u> \$ 151,914
---	--

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> \$ 28.40
---	--

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	6,206	29,276	51,170	58,362	61,831	64,771	67,874	70,977	74,080	76,856	\$ 561,402
SES Revenue		9,614	87,791	173,880	195,017	200,652	205,206	210,013	214,820	219,627	223,928	1,740,548
Total Distribution Charge	\$	<u>15,820</u>	<u>117,067</u>	<u>225,050</u>	<u>253,379</u>	<u>262,483</u>	<u>269,977</u>	<u>277,887</u>	<u>285,797</u>	<u>293,707</u>	<u>300,784</u>	<u>\$ 2,301,950</u>

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

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)

Net Present Value

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 QQQQ3
Enbridge Gas Community Expansion Project Proposal
Dungannon (Ashfield-Colborne-Wawanosh)

Section 3.4 Dungannon (Ashfield-Colborne-Wawanosh)

Total Forecasted Customers 182 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	38	21%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 60,043	6.7	-2.5	254	(97)
Electricity F/A	16	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 12,619	0.5	3.6	9	59
Electricity Baseboard	22	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 8,035	0.5	3.6	12	78
Propane	80	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 29,463	5.2	-1.1	415	(85)
Wood	16	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	9	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	182	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 110,160	12.9	3.6	690	(45)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 QQQQ4
Enbridge Gas Community Expansion Project Proposal
Dungannon (Ashfield-Colborne-Wawanosh)

Dungannon Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule QQQQ5
Enbridge Gas Community Expansion Project Proposal
Dungannon (Ashfield-Colborne-Wawanosh)

May 21, 2020

Steven Jelich
Director, Southwest Region Operations
Enbridge Gas Inc.
109 Commissioners Rd W.
London, ON N6A 4P1

Dear Mr. Jelich:

Re: Expression of Support for Natural Gas Expansion to The Township of Ashfield-Colborne-Wawanosh/ Benmiller, Dungannon, and Port Albert areas.

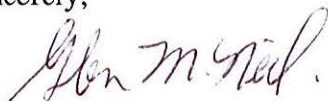
In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario 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 Ashfield-Colborne-Wawanosh, I would like to formally express our interest to have Benmiller, Dungannon, and Port Albert 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 (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,



Glen McNeil,
Mayor
Township of Ashfield-Colborne-Wawanosh

Schedule QQQQ6
Enbridge Gas Community Expansion Project Proposal
Dungannon (Ashfield-Colborne-Wawanosh)

RP-2002-0117
EB-2002-0327

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 Ashfield-Colborne-Wawanosh

(excluding Lot 1 Concession 2,3,4 and 5 East Division, Lot 1 in Concession 2 and 3 West Division and Lots 1, 2, 3 and 4 in Concessions 4 and 5 West Division).

This certificate replaces the certificate of the former Township of Colborne that is now within the Township of Ashfield-Colborne-Wawanosh.

DATED at Toronto, September 22, 2004.

ONTARIO ENERGY BOARD


John Zych
Board Secretary

EB-2015-0169

Certificate of Public Convenience and Necessity

The Ontario Energy Board 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 North Huron

DATED at Toronto, July 23, 2015

ONTARIO ENERGY BOARD

Pascale Duguay
Manager, Natural Gas Applications

EB-2013-0372

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 in the geographic boundaries of the

Municipality of Huron East

This certificate replaces the existing certificates held by Union for the former Village of Brussels (E.B.C. 226), the former Township of Grey (E.B.C. 229), the former Township of McKillop (F.B.C. 253), the former Town of Seaforth (F.B.C. 244), and the former Township of Tuckersmith (F.B.C. 250).

DATED at Toronto, December 19, 2013

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

Schedule RRRR
Enbridge Gas Community Expansion Project Proposal

Dungannon and Port Albert
(Ashfield-Colborne-Wawanosh)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Dungannon and Port Albert 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the communities of Dungannon and Port Albert within the Township of Ashfield-Colborne-Wawanosh. The proposed facilities will provide access to natural gas to a forecasted 276 customers (226 residential, 31 commercial / institutional, 12 agricultural intensive, 3 grain dryers and 4 industrial).

The proposed project will tie-in to an existing 4" polyethylene pipeline on _____. The proposed facilities will run _____ on _____ (from its intersection with _____) to _____, _____, _____, _____, _____, _____, _____, _____, _____ and _____. The pipeline will run through _____ to _____ to reach Port Albert and provide access to gas along _____, _____, _____, _____, _____, _____ and _____.

A reinforcement pipeline (3,250 m of 10" steel pipe) is required to accommodate additional loads on the distribution system. The proposed reinforcement will start on _____ approximately _____ and end near the intersection of _____ and _____ within the Municipality of Huron East.

In addition, 2 new distribution stations are required to be built – one in Dungannon and a second station for Port Albert.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	30,800
Polyethylene	4	1,000
Steel	4	29,000

The approximate length and size of the reinforcement pipeline required:

Pipe Type	Diameter (NPS)	Length (m)
Steel	10	3,250

Please refer to Schedule RRRR1 for Project Map.

3.2	<p>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.</p> <p>Please refer to Schedule RRRR2, Table 3.2.</p>
3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule RRRR2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule RRRR3, Table 3.4.</p>

3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule RRRR4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule RRRR5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule RRRR6 for Enbridge's CPCNs for the Township of Ashfield-Colborne-Wawanosh (RP-2002-0117 / EB-2002-0327), the Township of North Huron (EB-2015-0169) and the Municipality of Huron East (EB-2013-0372) which cover the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</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 RRRR2, 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 RRRR2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$39,758,502</p> <p>Please refer to Schedule RRRR2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$144,053</p> <p>Please refer to Schedule RRRR2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$28.89</p> <p>Please refer to Schedule RRRR2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule RRRR2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

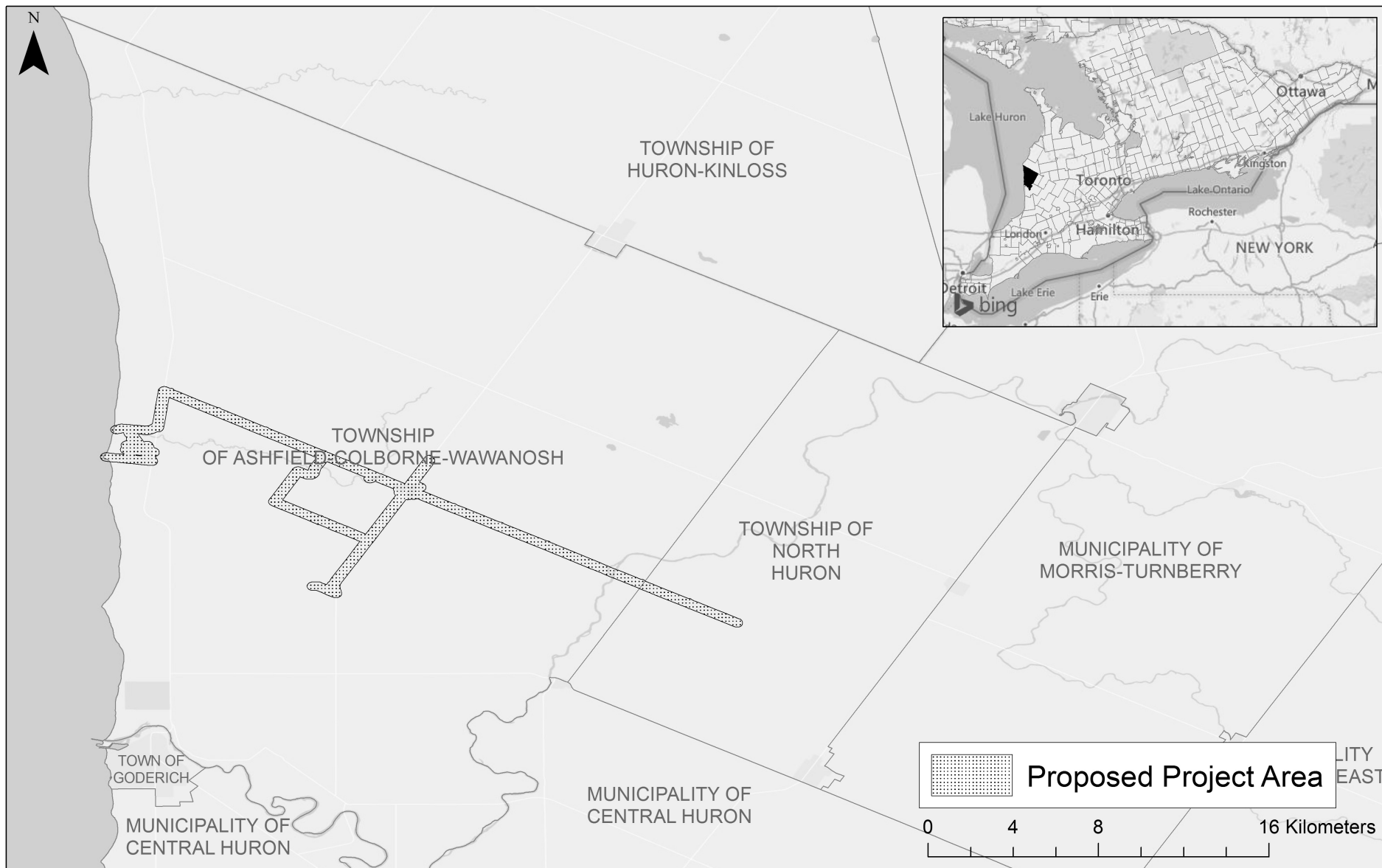
Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</p> <p>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).</p> <p>Please refer to Schedule RRRR2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule RRRR2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule RRRR4.</p>

Schedule RRRR1
Enbridge Gas Community Expansion Project Proposal

Dungannon and Port Albert
(Ashfield-Colborne-Wawanosh)

Dungannon & Port Albert



Schedule RRRR2
Enbridge Gas Community Expansion Project Proposal

Dungannon and Port Albert
(Ashfield-Colborne-Wawanosh)

Table 3.2 - Customer Attachments Over The Rate Stability Period

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

Project Year	1	2	3	4	5	6	7	8	9	10	Total
	70	52	35	17	17	7	7	7	7	7	226
	-	17	5	2	2	1	1	1	1	1	31
	-	-	-	-	-	-	-	-	-	-	-
	-	10	4	1	-	-	-	-	-	-	15
	-	3	1	-	-	-	-	-	-	-	4
	70	82	45	20	19	8	8	8	8	8	276
	70	152	197	217	236	244	252	260	268	276	

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

Customer Type	Annual Volumes - m3										Total
Project Year	1	2	3	4	5	6	7	8	9	10	Total
Residential	77,000	211,200	306,900	364,100	401,500	427,900	443,300	458,700	474,100	489,500	3,654,200
Commercial	-	25,400	57,700	66,800	71,200	74,500	76,700	78,900	81,100	83,300	615,600
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	143,300	343,800	402,100	403,200	403,200	403,200	403,200	403,200	403,200	3,308,400
Industrial	-	150,000	350,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	3,300,000
Total Volumes	77,000	529,900	1,058,400	1,233,000	1,275,900	1,305,600	1,323,200	1,340,800	1,358,400	1,376,000	10,878,200

Customer Type	Cumulative Volumes - m3										Total
Project Year	1	2	3	4	5	6	7	8	9	10	Total
Residential	77,000	288,200	595,100	959,200	1,360,700	1,788,600	2,231,900	2,690,600	3,164,700	3,654,200	
Commercial	-	25,400	83,100	149,900	221,100	295,600	372,300	451,200	532,300	615,600	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	143,300	487,100	889,200	1,292,400	1,695,600	2,098,800	2,502,000	2,905,200	3,308,400	
Industrial	-	150,000	500,000	900,000	1,300,000	1,700,000	2,100,000	2,500,000	2,900,000	3,300,000	
Total Volumes	77,000	606,900	1,665,300	2,898,300	4,174,200	5,479,800	6,803,000	8,143,800	9,502,200	10,878,200	

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

Total Capital Costs	Year 10

Table 4.3 - Revenue Requirement Over The Rate Stability Period

Project Year	1	2	3	4	5	6	7	8	9	10	Total
Revenue Requirement											

Closing Rate Base (net of proposed Section 36.2 funding)	Year 10

Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project

\$ 39,758,502

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$ 144,053

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

Section 36.2 Funding Amount Per Year 10 Volume (m3)

Year 10

\$ 28.89

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	11,432	45,468	78,802	92,799	99,168	103,578	106,191	108,804	111,417	114,030	\$ 871,688
SES Revenue		17,710	121,877	243,432	283,590	293,457	300,288	304,336	308,384	312,432	316,480	2,501,986
Total Distribution Charge	\$	29,142	167,345	322,234	376,389	392,625	403,866	410,527	417,188	423,849	430,510	\$ 3,373,674

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 RRRR3
Enbridge Gas Community Expansion Project Proposal

Dungannon and Port Albert
(Ashfield-Colborne-Wawanosh)

Section 3.4 Dungannon and Port Albert (Ashfield-Colborne-Wawanosh)

Total Forecasted Customers 276 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	58	21%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 91,054	6.7	-2.5	386	(147)
Electricity F/A	25	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 19,136	0.5	3.6	13	89
Electricity Baseboard	33	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 12,186	0.5	3.6	18	119
Propane	121	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 44,680	5.2	-1.1	629	(129)
Wood	25	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	14	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	276	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 167,056	12.9	3.6	1,046	(67)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 RRRR4
Enbridge Gas Community Expansion Project Proposal

Dungannon and Port Albert
(Ashfield-Colborne-Wawanosh)

Dungannon and Port Albert Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule RRRR5
Enbridge Gas Community Expansion Project Proposal

Dungannon and Port Albert
(Ashfield-Colborne-Wawanosh)

May 21, 2020

Steven Jelich
Director, Southwest Region Operations
Enbridge Gas Inc.
109 Commissioners Rd W.
London, ON N6A 4P1

Dear Mr. Jelich:

Re: Expression of Support for Natural Gas Expansion to The Township of Ashfield-Colborne-Wawanosh/ Benmiller, Dungannon, and Port Albert areas.

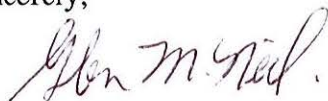
In December 2019, the Government of Ontario announced plans to further increase access to natural gas by making financial support available for new service expansion projects. This Natural Gas Expansion Program will unlock financial support needed to expand natural gas service to new areas across Ontario 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 Ashfield-Colborne-Wawanosh, I would like to formally express our interest to have Benmiller, Dungannon, and Port Albert 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 (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,



Glen McNeil,
Mayor
Township of Ashfield-Colborne-Wawanosh

Schedule RRRR6
Enbridge Gas Community Expansion Project Proposal

Dungannon and Port Albert
(Ashfield-Colborne-Wawanosh)

RP-2002-0117
EB-2002-0327

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

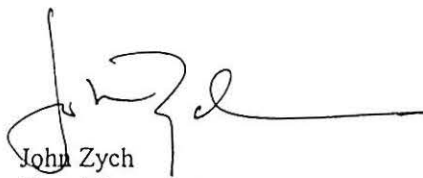
Township of Ashfield-Colborne-Wawanosh

(excluding Lot 1 Concession 2,3,4 and 5 East Division, Lot 1 in Concession 2 and 3 West Division and Lots 1, 2, 3 and 4 in Concessions 4 and 5 West Division).

This certificate replaces the certificate of the former Township of Colborne that is now within the Township of Ashfield-Colborne-Wawanosh.

DATED at Toronto, September 22, 2004.

ONTARIO ENERGY BOARD


John Zych
Board Secretary

Schedule SSSS
Enbridge Gas Community Expansion Project Proposal
Canning (Blandford-Blenheim)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Canning (Blandford-Blenheim) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent's Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the community of Canning within the Township of Blandford-Blenheim. The proposed facilities will provide access to natural gas to a forecasted 26 customers, (23 residential, 1 commercial / institutional, 1 agricultural intensive and 1 agricultural grain dryer).

The proposed project will tie-in to an existing 4" polyethylene pipe at the intersection of _____ and _____. The proposed facilities will run _____ along _____ and _____ along _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	5,220

Please refer to Schedule SSSS1 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 SSSS2, Table 3.2.

3.3

Provide the annual and cumulative forecast of volumes (in m³) 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 m³ 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 SSSS2, Table 3.3.

3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule SSSS3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule SSSS4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule SSSS5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule SSSS6 for Enbridge's CPCN for the Township of Blandford-Blenheim (EB-2010-0211) which covers the entire area of the proposed project.</p>

Part IV – Cost of Project															
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>														
4.2	<p>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).</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 SSSS2, Table 4.2.</p>														
4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</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 SSSS2, 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															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$1,950,063</p> <p>Please refer to Schedule SSSS2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$75,002</p> <p>Please refer to Schedule SSSS2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$11.29</p> <p>Please refer to Schedule SSSS2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule SSSS2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule SSSS2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule SSSS2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule SSSS4.</p>

Schedule SSSS1
Enbridge Gas Community Expansion Project Proposal
Canning (Blandford-Blenheim)

Canning (Township of Blandford-Blenheim)



Schedule SSSS2
Enbridge Gas Community Expansion Project Proposal
Canning (Blandford-Blenheim)

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	5	4	2	2	1	1	1	-	-	23
	-	1	-	-	-	-	-	-	-	-	1
	-	-	-	-	-	-	-	-	-	-	-
	-	2	-	-	-	-	-	-	-	-	2
	-	-	-	-	-	-	-	-	-	-	-
	<u>7</u>	<u>8</u>	<u>4</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>26</u>
	7	15	19	21	23	24	25	26	26	26	

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>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	7,700	20,900	30,800	37,400	41,800	45,100	47,300	49,500	50,600	50,600	381,700
Commercial	-	1,100	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	18,700
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	60,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	1,020,000
Industrial	-	-	-	-	-	-	-	-	-	-	-
Total Volumes	<u>7,700</u>	<u>82,000</u>	<u>153,000</u>	<u>159,600</u>	<u>164,000</u>	<u>167,300</u>	<u>169,500</u>	<u>171,700</u>	<u>172,800</u>	<u>172,800</u>	<u>1,420,400</u>

<u>Customer Type</u>	<u>Cumulative Volumes - m3</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	7,700	28,600	59,400	96,800	138,600	183,700	231,000	280,500	331,100	381,700	
Commercial	-	1,100	3,300	5,500	7,700	9,900	12,100	14,300	16,500	18,700	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	60,000	180,000	300,000	420,000	540,000	660,000	780,000	900,000	1,020,000	
Industrial	-	-	-	-	-	-	-	-	-	-	
Total Volumes	<u>7,700</u>	<u>89,700</u>	<u>242,700</u>	<u>402,300</u>	<u>566,300</u>	<u>733,600</u>	<u>903,100</u>	<u>1,074,800</u>	<u>1,247,600</u>	<u>1,420,400</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	\$ 1,950,063
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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> \$ 75,002
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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> \$ 11.29
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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	\$	1,143	5,452	9,270	10,250	10,903	11,393	11,720	12,047	12,210	12,210	\$ 96,598
SES Revenue		1,771	18,860	35,190	36,708	37,720	38,479	38,985	39,491	39,744	39,744	326,692
Total Distribution Charge	\$	<u>2,914</u>	<u>24,312</u>	<u>44,460</u>	<u>46,958</u>	<u>48,623</u>	<u>49,872</u>	<u>50,705</u>	<u>51,538</u>	<u>51,954</u>	<u>51,954</u>	<u>\$ 423,290</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 SSSS3
Enbridge Gas Community Expansion Project Proposal
Canning (Blandford-Blenheim)

Section 3.4 Canning (Blandford-Blenheim)

Total Forecasted Customers 26 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	\$ 2,829	\$ 1,258	\$ 1,571	\$ 8,578	6.7	-2.5	36	(14)
Electricity F/A	2	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 1,803	0.5	3.6	1	8
Electricity Baseboard	3	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 1,148	0.5	3.6	2	11
Propane	11	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 4,209	5.2	-1.1	59	(12)
Wood	2	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	1	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	26	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 15,737	12.9	3.6	99	(6)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 SSSS4
Enbridge Gas Community Expansion Project Proposal
Canning (Blandford-Blenheim)

Canning (Blandford-Blenheim) Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule SSSS5
Enbridge Gas Community Expansion Project Proposal
Canning (Blandford-Blenheim)



Township of Blandford-Blenheim

Box 100 / 47 Wilmot Street South
Drumbo, Ontario. N0J 1G0

Phone 519-463-5347
Fax 519-463-5881
Web www.blandfordblenheim.ca

June 15, 2020

Dear Brian Lennie,

**Re: Expression of Support for Natural Gas Expansion to Blandford-Blenheim Township –
CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS**

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 Blandford-Blenheim Township, I would like to formally express our interest to have the settlement areas of CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS 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 blue ink, appearing to read 'Mark Peterson', with a long horizontal flourish extending to the right.

Mark Peterson
Mayor

Schedule SSSS6
Enbridge Gas Community Expansion Project Proposal
Canning (Blandford-Blenheim)

EB-2010-0211

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 Blandford-Blenheim

This certificate replaces the parts of Certificate E.B.C. 32 and E.B.C. 85 currently held by Union Gas Limited associated with the former Township of Blandford, the former Township of Blenheim and the former Police Village of Plattsville.

DATED at Toronto, July 16, 2010
ONTARIO ENERGY BOARD

Original signed by

Neil McKay
Manager, Natural Gas Applications

Schedule TTTT
Enbridge Gas Community Expansion Project Proposal
Perry's Corners (Blandford-Blenheim)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Perry's Corners (Blandford-Blenheim) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent's Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the community of Perry's Corners within the Township of Blandford-Blenheim. The proposed facilities will provide access to natural gas to a forecasted 14 customers (13 residential and 1 commercial / institutional).

The proposed project will tie-in to an existing 2" polyethylene pipe, ____ of the intersection of _____ and _____. The proposed facilities run for approximately _____ and approximately _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	4,100

Please refer to Schedule TTTT1 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 TTTT2, Table 3.2.

3.3

Provide the annual and cumulative forecast of volumes (in m³) 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 m³ 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 TTTT2, Table 3.3.

3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule TTTT3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule TTTT4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule TTTT5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule TTTT6 for Enbridge's CPCN for the Township of Blandford-Blenheim (EB-2010-0211) which covers the entire area of the proposed project.</p>

Part IV – Cost of Project															
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>														
4.2	<p>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).</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 TTTT2, Table 4.2.</p>														
4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</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 TTTT2, 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															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$1,825,997</p> <p>Please refer to Schedule TTTT2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$130,428</p> <p>Please refer to Schedule TTTT2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$47.31</p> <p>Please refer to Schedule TTTT2, Table 5.3.</p>

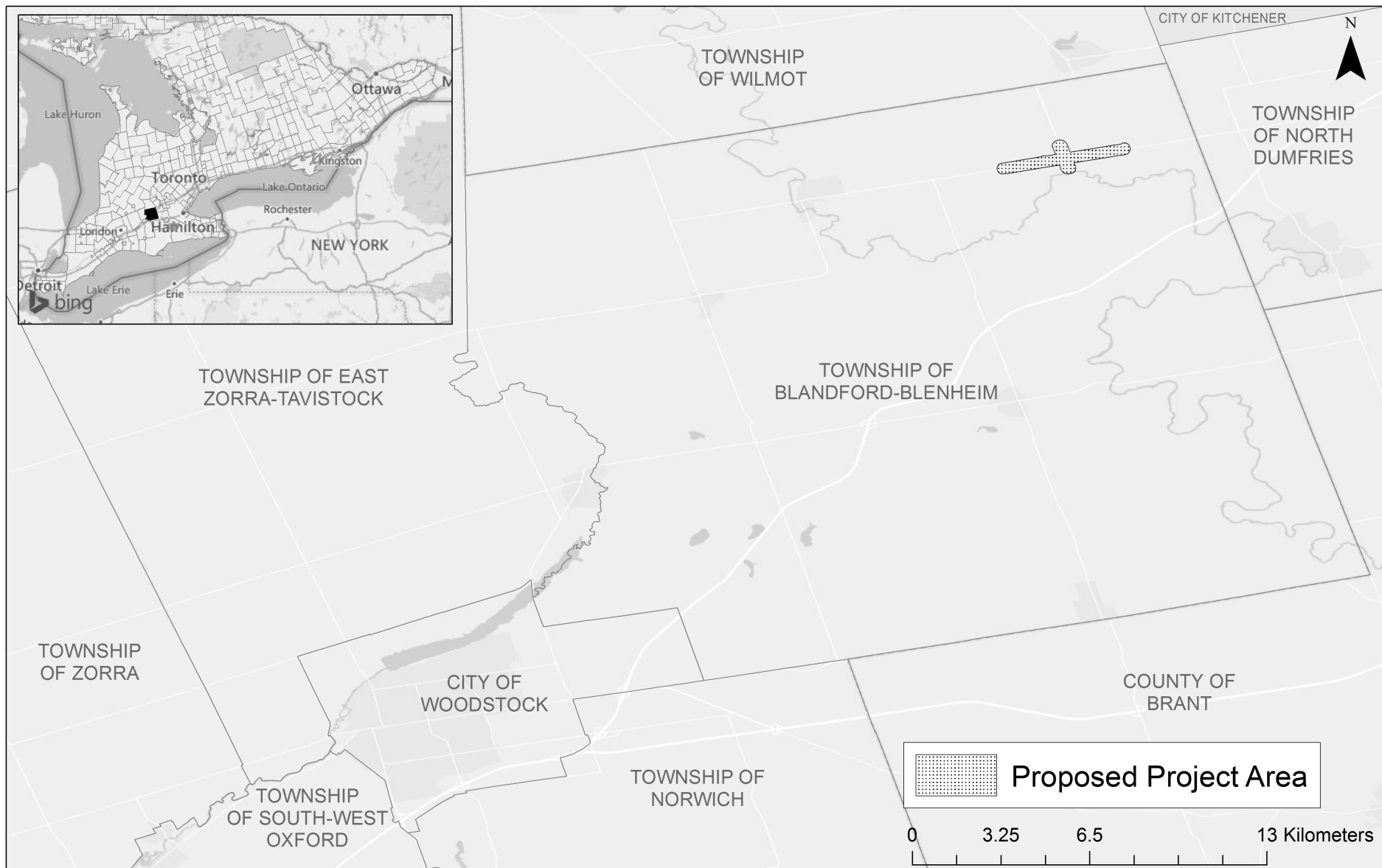
Part VI – Distribution Charge	
6.1	<p>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule TTTT2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule TTTT2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule TTTT2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule TTTT4.</p>

Schedule TTTT1
Enbridge Gas Community Expansion Project Proposal
Perry's Corners (Blandford-Blenheim)

Perry's Corners (Township of Blandford-Blenheim)



Schedule TTTT2
Enbridge Gas Community Expansion Project Proposal
Perry's Corners (Blandford-Blenheim)

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>
	4	3	2	1	1	1	1	-	-	-	13
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	1	-	-	-	-	-	-	-	-	1
	-	-	-	-	-	-	-	-	-	-	-
	<u>4</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>14</u>
	4	8	10	11	12	13	14	14	14	14	

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>
	4,400	12,100	17,600	20,900	23,100	25,300	27,500	28,600	28,600	28,600	216,700
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	85,000
	-	-	-	-	-	-	-	-	-	-	-
	<u>4,400</u>	<u>17,100</u>	<u>27,600</u>	<u>30,900</u>	<u>33,100</u>	<u>35,300</u>	<u>37,500</u>	<u>38,600</u>	<u>38,600</u>	<u>38,600</u>	<u>301,700</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>	
	4,400	16,500	34,100	55,000	78,100	103,400	130,900	159,500	188,100	216,700	
	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	
	-	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000	
	-	-	-	-	-	-	-	-	-	-	
	<u>4,400</u>	<u>21,500</u>	<u>49,100</u>	<u>80,000</u>	<u>113,100</u>	<u>148,400</u>	<u>185,900</u>	<u>224,500</u>	<u>263,100</u>	<u>301,700</u>	

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

Total Capital Costs

Year 10

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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Year 10

Closing Rate Base (net of proposed Section 36.2 funding)
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Table 5.1 - Total Amount of Section 36.2 Funding

Section 36.2 Funding Needed to Support the Project	\$ 1,825,997
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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> \$ 130,428
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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> \$ 47.31
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Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	653	2,067	3,154	3,644	3,971	4,298	4,624	4,787	4,787	4,787	\$ 36,774
SES Revenue		1,012	3,933	6,348	7,107	7,613	8,119	8,625	8,878	8,878	8,878	69,391
Total Distribution Charge	<u>\$</u>	<u>1,665</u>	<u>6,000</u>	<u>9,502</u>	<u>10,751</u>	<u>11,584</u>	<u>12,417</u>	<u>13,249</u>	<u>13,665</u>	<u>13,665</u>	<u>13,665</u>	<u>\$ 106,165</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 TTTT3
Enbridge Gas Community Expansion Project Proposal
Perry's Corners (Blandford-Blenheim)

Section 3.4 Perry's Corners (Blandford-Blenheim)

Total Forecasted Customers 14 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	3	21%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 4,619	6.7	-2.5	20	(7)
Electricity F/A	1	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 971	0.5	3.6	1	5
Electricity Baseboard	2	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 618	0.5	3.6	1	6
Propane	6	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 2,266	5.2	-1.1	32	(7)
Wood	1	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	1	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	14	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 8,474	12.9	3.6	53	(3)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 monthly average EDPRO residential rates for Zone 1 (March 2020).

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

Schedule TTTT4
Enbridge Gas Community Expansion Project Proposal
Perry's Corners (Blandford-Blenheim)

Perry's Corners (Blandford-Blenheim) Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule TTTT5
Enbridge Gas Community Expansion Project Proposal
Perry's Corners (Blandford-Blenheim)



Township of Blandford-Blenheim

Box 100 / 47 Wilmot Street South
Drumbo, Ontario. N0J 1G0

Phone 519-463-5347
Fax 519-463-5881
Web www.blandfordblenheim.ca

June 15, 2020

Dear Brian Lennie,

**Re: Expression of Support for Natural Gas Expansion to Blandford-Blenheim Township –
CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS**

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 Blandford-Blenheim Township, I would like to formally express our interest to have the settlement areas of CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS 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,

Mark Peterson
Mayor

Schedule TTTT6
Enbridge Gas Community Expansion Project Proposal
Perry's Corners (Blandford-Blenheim)

EB-2010-0211

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 Blandford-Blenheim

This certificate replaces the parts of Certificate E.B.C. 32 and E.B.C. 85 currently held by Union Gas Limited associated with the former Township of Blandford, the former Township of Blenheim and the former Police Village of Plattsville.

DATED at Toronto, July 16, 2010
ONTARIO ENERGY BOARD

Original signed by

Neil McKay
Manager, Natural Gas Applications

Schedule UUUU
Enbridge Gas Community Expansion Project Proposal
Ratho (Blandford-Blenheim)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Ratho (Blandford-Blenheim) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent's Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the community of Ratho within the Township of Blandford-Blenheim. The proposed facilities will provide access to natural gas to a forecasted 21 customers, (18 residential, 1 commercial / institutional, 1 agricultural farm and 1 agricultural grain dryer).

The proposed project will tie-in to an existing 2" polyethylene pipe along _____ near the intersection of _____ and _____. The proposed facilities will run _____ along _____ and partially branch on to _____ and _____.

Two existing stations require upsizing upgrades.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	4,950
Polyethylene	4	2,185

Please refer to Schedule UUUU1 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 UUUU2, Table 3.2.

3.3

Provide the annual and cumulative forecast of volumes (in m³) 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 m³ 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 UUUU2, Table 3.3.

3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule UUUU3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule UUUU4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule UUUU5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule UUUU6 for Enbridge's CPCN for the Township of Blandford-Blenheim (EB-2010-0211) which covers the entire area of the proposed project.</p>

Part IV – Cost of Project															
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>														
4.2	<p>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).</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 UUUU2, Table 4.2.</p>														
4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</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 UUUU2, Table 4.3.</p>	Description	Year 1	Year 2...	Year 10	Total	Revenue Requirement					Description	Year 10	Closing Rate Base	
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Revenue Requirement															
Description	Year 10														
Closing Rate Base															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$4,386,975</p> <p>Please refer to Schedule UUUU2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$204,999</p> <p>Please refer to Schedule UUUU2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$26.97</p> <p>Please refer to Schedule UUUU2, Table 5.3.</p>

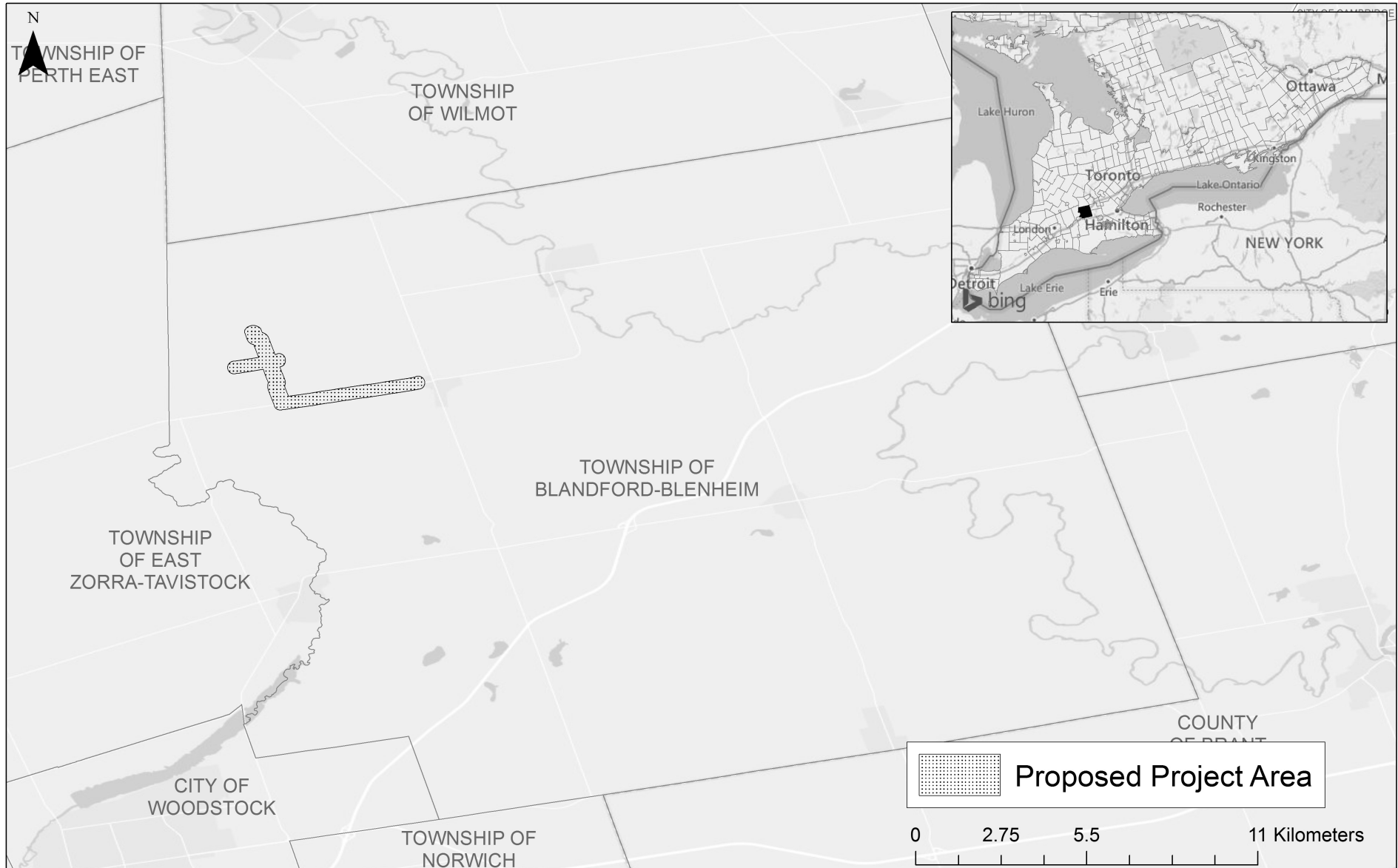
Part VI – Distribution Charge	
6.1	<p>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule UUUU2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule UUUU2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule UUUU2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule UUUU4.</p>

Schedule UUUU1
Enbridge Gas Community Expansion Project Proposal
Ratho (Blandford-Blenheim)

Ratho (Township of Blandford-Blenheim)



Schedule UUUU2
Enbridge Gas Community Expansion Project Proposal
Ratho (Blandford-Blenheim)

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>
	6	4	3	1	1	1	1	1	-	-	18
	-	1	-	-	-	-	-	-	-	-	1
	-	-	-	-	-	-	-	-	-	-	-
	-	2	-	-	-	-	-	-	-	-	2
	-	-	-	-	-	-	-	-	-	-	-
	<u>6</u>	<u>7</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>=</u>	<u>=</u>	<u>21</u>
	6	13	16	17	18	19	20	21	21	21	

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	6,160	16,940	24,640	29,260	32,340	34,980	37,180	39,380	40,480	40,480	301,840
Commercial	-	1,100	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	18,700
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	60,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	1,020,000
Industrial	-	-	-	-	-	-	-	-	-	-	-
Total Volumes	<u>6,160</u>	<u>78,040</u>	<u>146,840</u>	<u>151,460</u>	<u>154,540</u>	<u>157,180</u>	<u>159,380</u>	<u>161,580</u>	<u>162,680</u>	<u>162,680</u>	<u>1,340,540</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	6,160	23,100	47,740	77,000	109,340	144,320	181,500	220,880	261,360	301,840	
Commercial	-	1,100	3,300	5,500	7,700	9,900	12,100	14,300	16,500	18,700	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	60,000	180,000	300,000	420,000	540,000	660,000	780,000	900,000	1,020,000	
Industrial	-	-	-	-	-	-	-	-	-	-	
Total Volumes	<u>6,160</u>	<u>84,200</u>	<u>231,040</u>	<u>382,500</u>	<u>537,040</u>	<u>694,220</u>	<u>853,600</u>	<u>1,015,180</u>	<u>1,177,860</u>	<u>1,340,540</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	\$ 4,386,975
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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> \$ 204,999
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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> \$ 26.97
---	--

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	915	4,864	8,356	9,041	9,499	9,891	10,217	10,544	10,707	10,707	\$ 84,741
SES Revenue		1,417	17,949	33,773	34,836	35,544	36,151	36,657	37,163	37,416	37,416	308,324
Total Distribution Charge	\$	<u>2,331</u>	<u>22,813</u>	<u>42,129</u>	<u>43,877</u>	<u>45,043</u>	<u>46,042</u>	<u>46,875</u>	<u>47,707</u>	<u>48,124</u>	<u>48,124</u>	<u>\$ 393,065</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 UUUU3
Enbridge Gas Community Expansion Project Proposal
Ratho (Blandford-Blenheim)

Section 3.4 Ratho (Blandford-Blenheim)

Total Forecasted Customers 21 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	4	21%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 6,928	6.7	-2.5	29	(11)
Electricity F/A	2	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 1,456	0.5	3.6	1	7
Electricity Baseboard	3	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 927	0.5	3.6	1	9
Propane	9	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 3,400	5.2	-1.1	48	(10)
Wood	2	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	1	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	21	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 12,711	12.9	3.6	80	(5)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 UUUU4
Enbridge Gas Community Expansion Project Proposal
Ratho (Blandford-Blenheim)

Ratho (Blandford-Blenheim) Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule UUUU5
Enbridge Gas Community Expansion Project Proposal
Ratho (Blandford-Blenheim)



Township of Blandford-Blenheim

Box 100 / 47 Wilmot Street South
Drumbo, Ontario. N0J 1G0

Phone 519-463-5347
Fax 519-463-5881
Web www.blandfordblenheim.ca

June 15, 2020

Dear Brian Lennie,

**Re: Expression of Support for Natural Gas Expansion to Blandford-Blenheim Township –
CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS**

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 Blandford-Blenheim Township, I would like to formally express our interest to have the settlement areas of CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS 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 blue ink, appearing to read 'Mark Peterson', with a long horizontal flourish extending to the right.

Mark Peterson
Mayor

Schedule UUUU6
Enbridge Gas Community Expansion Project Proposal
Ratho (Blandford-Blenheim)

EB-2010-0211

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 Blandford-Blenheim

This certificate replaces the parts of Certificate E.B.C. 32 and E.B.C. 85 currently held by Union Gas Limited associated with the former Township of Blandford, the former Township of Blenheim and the former Police Village of Plattsville.

DATED at Toronto, July 16, 2010
ONTARIO ENERGY BOARD

Original signed by

Neil McKay
Manager, Natural Gas Applications

Schedule VVVV
Enbridge Gas Community Expansion Project Proposal
Richwood (Blandford-Blenheim)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Richwood (Blandford-Blenheim) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the community of Richwood within the Township of Blandford-Blenheim. The proposed facilities will provide access to natural gas to a forecasted 27 customers (24 residential and 3 small commercial).

The proposed project will tie-in to an existing 2" polyethylene pipe, _____ of the community of Drumbo along _____. The proposed facilities will run _____ on _____ then _____ on _____ to _____ and then _____ to _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	6,530

Please refer to Schedule VVVV1 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 VVVV2, Table 3.2.

3.3

Provide the annual and cumulative forecast of volumes (in m³) 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 m³ 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 VVVV2, Table 3.3.

3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule VVVV3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule VVVV4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule VVVV5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule VVVV6 for Enbridge's CPCN for the Township of Blandford-Blenheim (EB-2010-0211) which covers the entire area of the proposed project.</p>

Part IV – Cost of Project															
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>														
4.2	<p>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).</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 VVVV2, Table 4.2.</p>														
4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</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 VVVV2, 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															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$2,968,422</p> <p>Please refer to Schedule VVVV2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$109,942</p> <p>Please refer to Schedule VVVV2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$49.97</p> <p>Please refer to Schedule VVVV2, Table 5.3.</p>

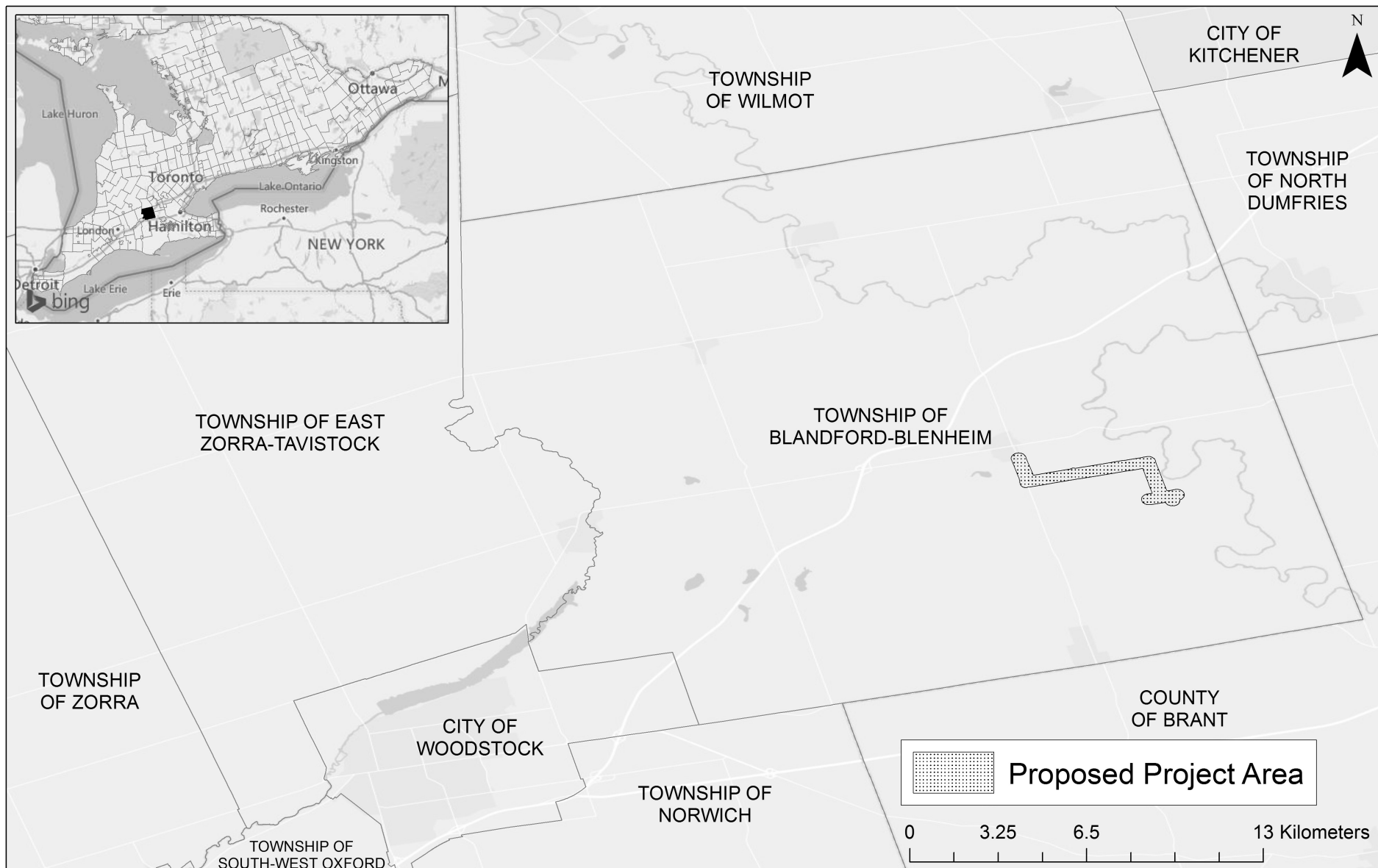
Part VI – Distribution Charge	
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Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions 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.</p> <p>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).</p> <p>Please refer to Schedule VVVV2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule VVVV2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule VVVV4.</p>

Schedule VVVV1
Enbridge Gas Community Expansion Project Proposal
Richwood (Blandford-Blenheim)

Richwood (Township of Blandford-Blenheim)



Schedule VVVV2
Enbridge Gas Community Expansion Project Proposal
Richwood (Blandford-Blenheim)

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	5	4	2	2	1	1	1	1	-	24
	-	1	1	1	-	-	-	-	-	-	3
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-
	<u>7</u>	<u>6</u>	<u>5</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>-</u>	<u>27</u>
	7	13	18	21	23	24	25	26	27	27	

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>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	7,700	20,900	30,800	37,400	41,800	45,100	47,300	49,500	51,700	52,800	385,000
Commercial	-	1,100	3,300	5,500	6,600	6,600	6,600	6,600	6,600	6,600	49,500
Institutional	-	-	-	-	-	-	-	-	-	-	-
Agricultural	-	-	-	-	-	-	-	-	-	-	-
Industrial	-	-	-	-	-	-	-	-	-	-	-
Total Volumes	<u>7,700</u>	<u>22,000</u>	<u>34,100</u>	<u>42,900</u>	<u>48,400</u>	<u>51,700</u>	<u>53,900</u>	<u>56,100</u>	<u>58,300</u>	<u>59,400</u>	<u>434,500</u>

<u>Customer Type</u>	<u>Cumulative Volumes - m3</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	7,700	28,600	59,400	96,800	138,600	183,700	231,000	280,500	332,200	385,000	
Commercial	-	1,100	4,400	9,900	16,500	23,100	29,700	36,300	42,900	49,500	
Institutional	-	-	-	-	-	-	-	-	-	-	
Agricultural	-	-	-	-	-	-	-	-	-	-	
Industrial	-	-	-	-	-	-	-	-	-	-	
Total Volumes	<u>7,700</u>	<u>29,700</u>	<u>63,800</u>	<u>106,700</u>	<u>155,100</u>	<u>206,800</u>	<u>260,700</u>	<u>316,800</u>	<u>375,100</u>	<u>434,500</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	\$ 2,968,422
--	--------------

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<u><u>Year 10</u></u> \$ 109,942
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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><u>Year 10</u></u> \$ 49.97
---	---

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	1,143	3,266	5,063	6,369	7,186	7,676	8,003	8,329	8,656	8,819	\$ 64,511
SES Revenue		1,771	5,060	7,843	9,867	11,132	11,891	12,397	12,903	13,409	13,662	99,935
Total Distribution Charge	\$	<u>2,914</u>	<u>8,326</u>	<u>12,906</u>	<u>16,236</u>	<u>18,318</u>	<u>19,567</u>	<u>20,400</u>	<u>21,232</u>	<u>22,065</u>	<u>22,481</u>	<u>\$ 164,446</u>

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

<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>

Net Present Value

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 VVVV3
Enbridge Gas Community Expansion Project Proposal
Richwood (Blandford-Blenheim)

Section 3.4 Richwood (Blandford-Blenheim)

Total Forecasted Customers 27 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	6	21%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 8,907	6.7	-2.5	38	(14)
Electricity F/A	2	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 1,872	0.5	3.6	1	9
Electricity Baseboard	3	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 1,192	0.5	3.6	2	12
Propane	12	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 4,371	5.2	-1.1	62	(13)
Wood	2	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	1	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	27	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 16,342	12.9	3.6	102	(7)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 VVVV4
Enbridge Gas Community Expansion Project Proposal
Richwood (Blandford-Blenheim)

Richwood (Blandford-Blenheim) Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule VVVV5
Enbridge Gas Community Expansion Project Proposal
Richwood (Blandford-Blenheim)



Township of Blandford-Blenheim

Box 100 / 47 Wilmot Street South
Drumbo, Ontario. N0J 1G0

Phone 519-463-5347
Fax 519-463-5881
Web www.blandfordblenheim.ca

June 15, 2020

Dear Brian Lennie,

**Re: Expression of Support for Natural Gas Expansion to Blandford-Blenheim Township –
CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS**

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 Blandford-Blenheim Township, I would like to formally express our interest to have the settlement areas of CANNING, RICHWOOD, RATHO, and PERRY'S CORNERS 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,

Mark Peterson
Mayor

Schedule VVVV6
Enbridge Gas Community Expansion Project Proposal
Richwood (Blandford-Blenheim)

EB-2010-0211

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 Blandford-Blenheim

This certificate replaces the parts of Certificate E.B.C. 32 and E.B.C. 85 currently held by Union Gas Limited associated with the former Township of Blandford, the former Township of Blenheim and the former Police Village of Plattsville.

DATED at Toronto, July 16, 2010
ONTARIO ENERGY BOARD

Original signed by

Neil McKay
Manager, Natural Gas Applications

Schedule WWWW
Enbridge Gas Community Expansion Project Proposal
Harley and Glen Morris (Brant County)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Harley and Glen Morris (Brant County) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent's Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the communities of Harley and Glen Morris in the single-tier municipality of the County of Brant. The proposed facilities will provide access to natural gas to a forecasted 224 customers (202 residential, 21 commercial / institutional and 1 industrial).

For Harley, the proposed project will tie-in to an existing 2" steel pipeline at the intersection of _____ (_____) and _____. The proposed facilities in Harley will run _____ along _____ to _____ (and _____ along _____), and _____ on _____ to run along parts of _____, _____ and _____.

A new station is required in Harley to accommodate additional customers in Harley.

For Glen Morris, the proposed project will tie-in to an existing 4" polyethylene pipeline at the intersection of _____ and _____.

The proposed facilities in Glen Morris will run _____ along _____ to _____, _____, then _____ on _____ to _____, _____, _____, _____, _____, _____, _____, _____, _____ and _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	15,875
Polyethylene	4	13,185

Please refer to Schedule WWWW1 for Project Maps.

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 WWWW2, Table 3.2.

3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule WWWW2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule WWWW3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule WWWW4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule WWWW5.</p>

3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule WWWW6 for Enbridge's CPCN for the County of Brant (RP-2003-0039 / EB-2003-0047) which covers the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 WWWW2, 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 WWWW2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$11,236,428</p> <p>Please refer to Schedule WWWW2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$50,207</p> <p>Please refer to Schedule WWWW2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$9.63</p> <p>Please refer to Schedule WWWW2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule WWWW2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule WWWW2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule WWWW2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule WWW4.</p>

Schedule WWWW1
Enbridge Gas Community Expansion Project Proposal
Harley and Glen Morris (Brant County)

Brant County - Harley and Glen Morris



Schedule WWWW2
Enbridge Gas Community Expansion Project Proposal
Harley and Glen Morris (Brant County)

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>
	62	47	31	16	16	6	6	6	6	6	202
	-	8	2	1	1	1	-	-	-	-	13
	-	1	-	-	-	-	-	-	-	-	1
	-	4	1	1	1	-	-	-	-	-	7
	-	1	-	-	-	-	-	-	-	-	1
	<u>62</u>	<u>61</u>	<u>34</u>	<u>18</u>	<u>18</u>	<u>7</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>224</u>
	62	123	157	174	192	199	205	211	218	224	

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	68,420	188,155	273,680	324,995	359,205	383,152	396,836	410,520	424,204	437,888	3,267,055
Commercial	-	14,045	29,960	32,930	35,130	37,330	38,430	38,430	38,430	38,430	303,115
Institutional	-	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	425,000
Agricultural	-	120,000	290,000	390,000	490,000	540,000	540,000	540,000	540,000	540,000	3,990,000
Industrial	-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
Total Volumes	<u>68,420</u>	<u>397,200</u>	<u>743,640</u>	<u>897,925</u>	<u>1,034,335</u>	<u>1,110,482</u>	<u>1,125,266</u>	<u>1,138,950</u>	<u>1,152,634</u>	<u>1,166,318</u>	<u>8,835,170</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	68,420	256,575	530,255	855,250	1,214,455	1,597,607	1,994,443	2,404,963	2,829,167	3,267,055	
Commercial	-	14,045	44,005	76,935	112,065	149,395	187,825	226,255	264,685	303,115	
Institutional	-	25,000	75,000	125,000	175,000	225,000	275,000	325,000	375,000	425,000	
Agricultural	-	120,000	410,000	800,000	1,290,000	1,830,000	2,370,000	2,910,000	3,450,000	3,990,000	
Industrial	-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000	
Total Volumes	<u>68,420</u>	<u>465,620</u>	<u>1,209,260</u>	<u>2,107,185</u>	<u>3,141,520</u>	<u>4,252,002</u>	<u>5,377,268</u>	<u>6,516,218</u>	<u>7,668,852</u>	<u>8,835,170</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

\$ 11,236,428

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$ 50,207

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

Section 36.2 Funding Amount Per Year 10 Volume (m3)

Year 10

\$ 9.63

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	10,159	36,338	59,497	71,119	80,086	85,749	87,944	89,976	92,007	94,039	\$ 706,913
SES Revenue		15,737	91,356	171,037	206,523	237,897	255,411	258,811	261,959	265,106	268,253	2,032,089
Total Distribution Charge	\$	25,895	127,694	230,534	277,641	317,983	341,160	346,755	351,934	357,113	362,292	\$ 2,739,002

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 WWWW3
Enbridge Gas Community Expansion Project Proposal
Harley and Glen Morris (Brant County)

Section 3.4 Harley and Glen Morris (Brant County)

Total Forecasted Customers 224 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	47	21%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 73,899	6.7	-2.5	313	(119)
Electricity F/A	20	9%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 15,531	0.5	3.6	11	72
Electricity Baseboard	27	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 9,890	0.5	3.6	15	96
Propane	99	44%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 36,262	5.2	-1.1	511	(104)
Wood	20	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	11	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	224	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 135,582	12.9	3.6	849	(55)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 WWWW4
Enbridge Gas Community Expansion Project Proposal
Harley and Glen Morris (Brant County)

Harley and Glen Morris (Brant County) Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule WWWW5
Enbridge Gas Community Expansion Project Proposal
Harley and Glen Morris (Brant County)



The County of Brant

David Bailey
MAYOR

Mr. Murray Costello, Regional Director
Enbridge Gas Inc.

Dear Mr. Costello,

Re: Expression of Support for Expansion of Natural Gas into Glen Morris and Harley

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 County of Brant, I would like to formally express our interest to have an expansion of natural gas into Glen Morris and Harley 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,

David Bailey, Mayor
County of Brant

Schedule WWWW6
Enbridge Gas Community Expansion Project Proposal
Harley and Glen Morris (Brant County)

Ontario Energy
Board

Commission de l'Énergie
de l'Ontario



RP-2003-0039
EB-2003-0047

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 an order cancelling and replacing the existing
Certificates of Public Convenience and Necessity for the County
of Brant.

Before:

Art Birchenough
Presiding Member

Ken McCann
Member

ORDER GRANTING A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

Union Gas Limited ("Union") filed a application dated February 20, 2003 (the "Certificate Application") with the Ontario Energy Board (the "Board") under the *Municipal Franchises Act*, R.S.O. 1990, c. M.55 as amended (the "Act") for an order cancelling the existing Certificates of Public Convenience and Necessity for the predecessor municipalities of the County of Brant (the City of Fort William (F.B.C. 70) and the City of Port Arthur (F.B.C. 71)) and replacing them with a Certificate of Public Convenience and Necessity for the new County of Brant. The Board has assigned File No. RP-2003-0039/EB-2003-0047 to this Certificate Application.

The Board's Notice of Application was published on March 21, 2003. There were no intervenors. On April 30, 2003 the Board issued a Notice of Written Hearing. No party satisfied the Board that there was a good reason for not holding a written hearing. The replacement Certificate does not grant Union any additional rights to those it held under the predecessor certificates, and is requested by Union in order to recognize new municipal boundaries.

The Board found that, based on the evidence, granting the Certificate Application was in the public interest.

THE BOARD THEREFORE ORDERS THAT:

1. The existing Certificates of Public Convenience and Necessity for the County of Brant (F.B.C. 259), the Town of Paris (F.B.C. 259), the Township of Brantford (F.B.C. 259), the Township of Burford (F.B.C. 259 and E.B.C. 5), the Township of Oakland (E.B.C. 169 and E.B.C. 210), the Township of Onondaga (F.B.C. 259), and the Township of South Dumfries (F.B.C. 259) are cancelled and replaced with a single Certificate of Public Convenience and Necessity for the County of Brant (EB-2003-0047).).
2. A Certificate of Public Convenience and Necessity is granted to Union Gas Limited to construct works to supply gas in the City of Brant (EB-2003-0047).

DATED at Toronto, July 9, 2003.
ONTARIO ENERGY BOARD


Peter H. O'Dell
Assistant Board Secretary

Schedule XXXX
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ BD)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <u>Cavan Monaghan – _____</u> (BD) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent's Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service within the Township of Cavan Monaghan along _____, _____ and additional streets in the immediate vicinity. The proposed facilities will provide access to natural gas to a forecasted 75 customers (74 residential and 1 commercial / institutional).

The proposed project will tie-in to an existing station at the intersection of _____ and _____. The existing station will require a rebuild in order to support the increased load. The supply lateral runs _____ along _____ and _____ along _____.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	2,880

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length
Polyethylene	2	6,678

Please refer to Schedule XXXX1 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 XXXX2, Table 3.2.

3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule XXXX2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule XXXX3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule XXXX4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule XXXX5.</p>

3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule XXXX6 from Enbridge's CPCN for the Township of Cavan Monaghan (RP-2004-0125 / EB-2004-0198) which covers the entire area of the proposed project.</p> <p>(Note: The Township of Cavan and the Village of Millbrook, previously part of Durham County, in 1974 became part of Peterborough County, and were amalgamated, along with North Monaghan, into one township - Cavan-Millbrook-North Monaghan - in 1998. In 2007, the township was renamed Cavan Monaghan.)</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 XXXX2, Table 4.2.</p>

4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th>Description</th> <th>Year 1</th> <th>Year 2...</th> <th>Year 10</th> <th>Total</th> </tr> <tr> <td>Revenue Requirement</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th>Description</th> <th>Year 10</th> </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 XXXX2, 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															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$3,720,341</p> <p>Please refer to Schedule XXXX2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$49,605</p> <p>Please refer to Schedule XXXX2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$13.52</p> <p>Please refer to Schedule XXXX2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule XXXX2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

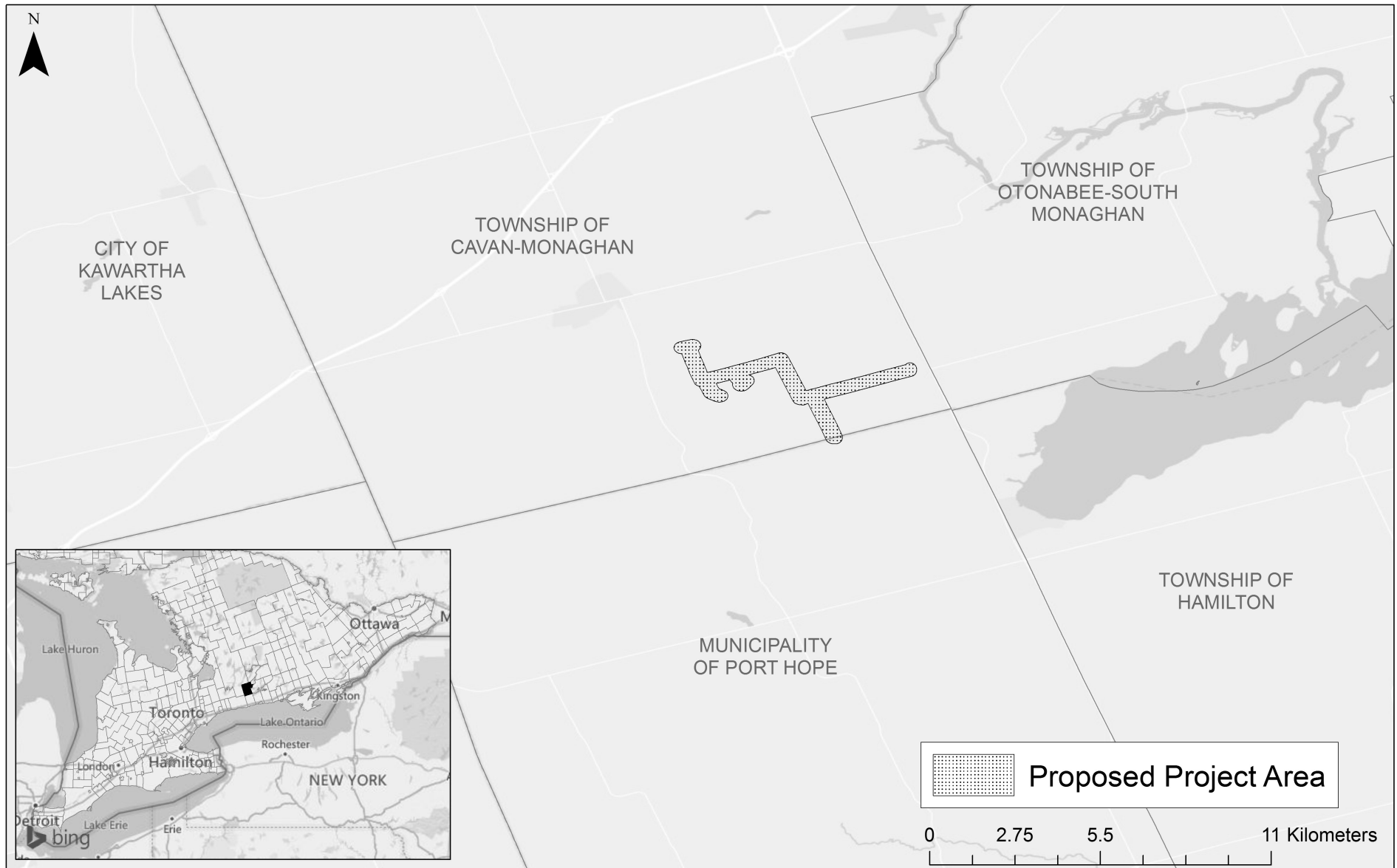
Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</p> <p>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).</p> <p>Please refer to Schedule XXXX2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule XXXX2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule XXXX4.</p>

Schedule XXXX1
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ BD)

Cavan Monaghan 1



Schedule XXXX2
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ BD)

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		23	17	12	6	6	2	2	2	2	2	74
Commercial	Firm		-	-	-	-	-	-	-	-	-	-	-
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	1	-	-	-	-	-	-	-	-	1
Industrial	Firm		-	-	-	-	-	-	-	-	-	-	-
Total Customers			<u>23</u>	<u>18</u>	<u>12</u>	<u>6</u>	<u>6</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>75</u>
Cumulative Customers			23	41	53	59	65	67	69	71	73	75	

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		27,600	75,600	110,400	132,000	146,400	156,000	160,800	165,600	170,400	175,200	1,320,000
Commercial		-	-	-	-	-	-	-	-	-	-	-
Institutional		-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
Industrial		-	-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>27,600</u>	<u>125,600</u>	<u>210,400</u>	<u>232,000</u>	<u>246,400</u>	<u>256,000</u>	<u>260,800</u>	<u>265,600</u>	<u>270,400</u>	<u>275,200</u>	<u>2,170,000</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		27,600	103,200	213,600	345,600	492,000	648,000	808,800	974,400	1,144,800	1,320,000
Commercial		-	-	-	-	-	-	-	-	-	-
Institutional		-	-	-	-	-	-	-	-	-	-
Agricultural		-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000
Industrial		-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>27,600</u>	<u>153,200</u>	<u>363,600</u>	<u>595,600</u>	<u>842,000</u>	<u>1,098,000</u>	<u>1,358,800</u>	<u>1,624,400</u>	<u>1,894,800</u>	<u>2,170,000</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>	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

\$3,720,341

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$49,605

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

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$13.52

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	4,836	15,744	24,340	28,125	30,648	32,330	33,171	34,012	34,853	35,694	\$273,754
SES Revenue		6,348	28,888	48,392	53,360	56,672	58,880	59,984	61,088	62,192	63,296	499,100
Total Distribution Charge	\$	11,184	44,632	72,732	81,485	87,320	91,210	93,155	95,100	97,045	98,990	\$772,854

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 XXXX3
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ BD)

Section 3.4 Cavan Monaghan - _____ (BD)

Total Forecasted Customers

75

Penetration Rate

65%

EB-2019-0255
Schedule XXXX3
Redacted

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 24,723	7.2	-2.7	113	(42)
Electricity F/A	7	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 4,769	0.6	3.9	4	26
Electricity Baseboard	9	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 6,358	0.6	3.9	5	35
Propane	33	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 9,350	5.6	-1.1	184	(36)
Wood	7	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	4	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	75	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 45,200	13.9	4.1	307	(16)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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 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 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 XXXX4
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ BD)

Cavan Monaghan - _____ (BD) Community Expansion Project
Pipeline Construction Schedule

[illegible]

Schedule XXXX5
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ BD)



June 1, 2020

Mark Wilson
Enbridge Gas Inc.
Senior Advisor, Municipal and Stakeholder Relations
500 Consumers Road
Toronto, ON
M2J 1P8

Dear Mr. Wilson,

Re: Expression of Support for Natural Gas Expansion in the Township of Cavan Monaghan

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 Cavan Monaghan, I would like to formally express our interest to have unserved areas of the Township, as identified by Enbridge Gas, included on the list of projects Enbridge Gas proposes to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program. The Council has requested that Enbridge consider

[REDACTED] These are as per the attached plans. The Township requests that you consider the attached alternatives for servicing in lieu of your original proposed areas..

Based on the Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may include support for projects 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.

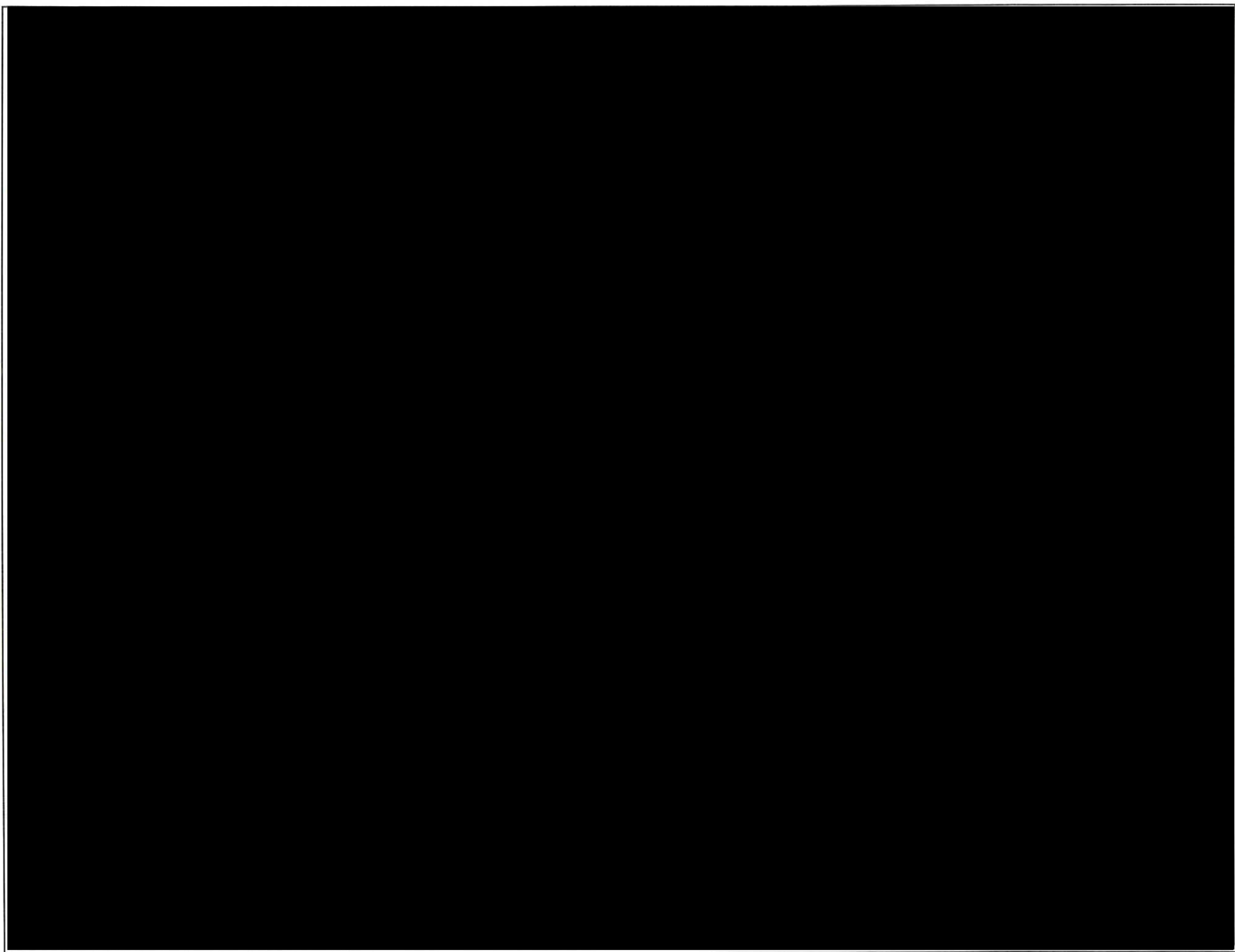
Sincerely,

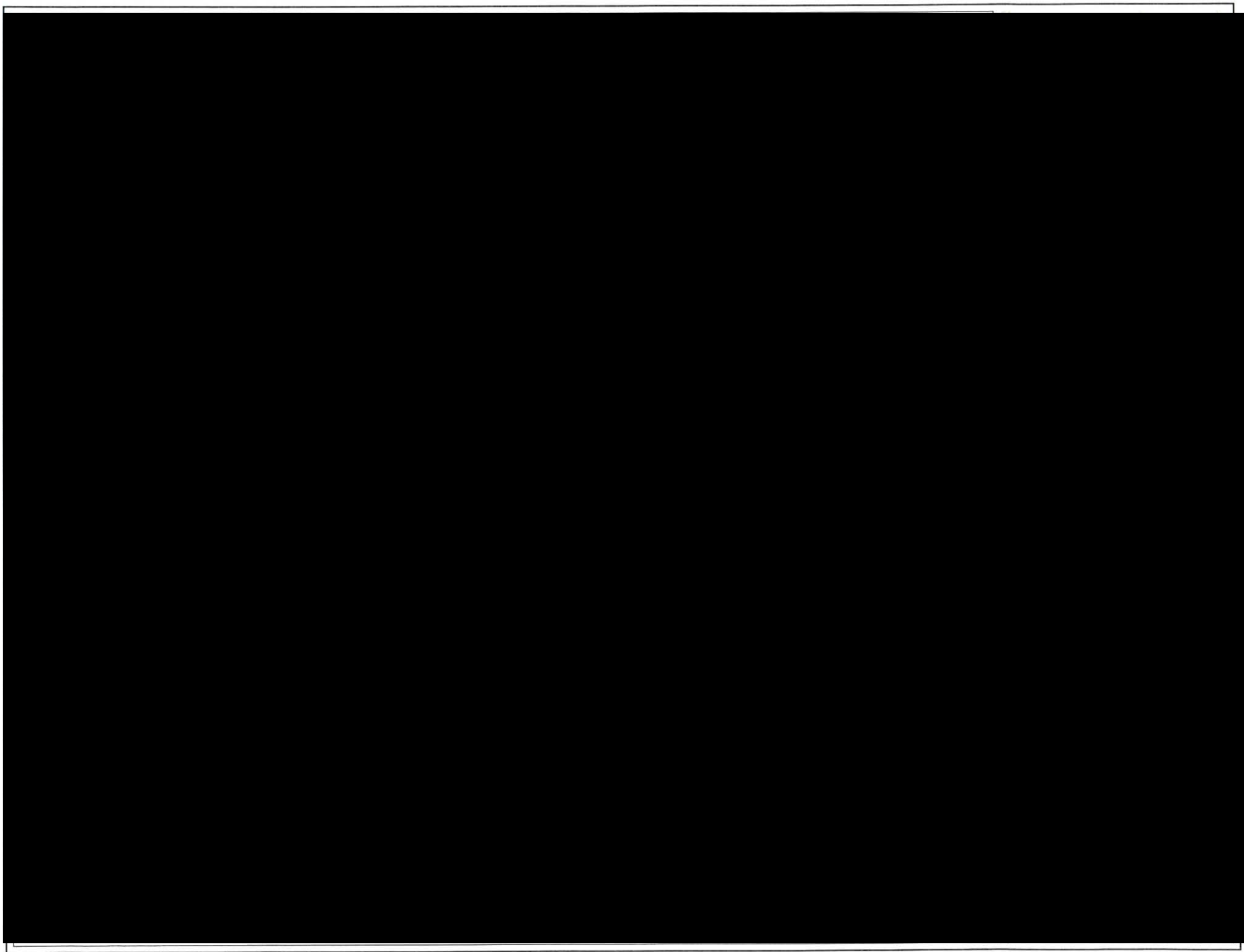

Scott McFadden, Mayor
Township of Cavan Monaghan
705-201-1026
mayor@cavanmonaghan.net

988 County Road 10
Millbrook, Ontario L0A 1G0
www.cavanmonaghan.net

Phone: (705) 932-2929
Fax: (705) 932-3458
Email: services@cavanmonaghan.net







Schedule XXXX6
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ BD)

Ontario Energy
Board

Commission de l'Énergie
de l'Ontario



RP-2004-0125

EB-2004-0198

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 Cavan-Millbrook-North Monaghan.

This certificate replaces the certificates of the former municipalities that are now within the Township of Cavan-Millbrook-North Monaghan.

DATED at Toronto, July 16, 2004.

ONTARIO ENERGY BOARD

Peter H. O'Dell
Acting Board Secretary

Schedule YYYY
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ MD)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Cavan Monaghan – _____ (MD) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service within the Township of Cavan Monaghan along _____. The proposed facilities will provide access to natural gas to a forecasted 22 customers (15 residential, 4 commercial / institutional and 3 industrial).

The proposed project will tie-in to an existing system at the intersection of _____ and _____. The proposed project will require a new station at this tie-in to cut the pressure from XHP to distribution pressure. The distribution facilities run _____ along _____ from the tie-in and ends at _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	4,241
Steel	2	6

Please refer to Schedule YYYY1 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 YYYY2, Table 3.2.

3.3

Provide the annual and cumulative forecast of volumes (in m³) 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 m³ 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 YYYY2, Table 3.3.

3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule YYYY3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule YYYY4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule YYYY5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule YYYY6 for Enbridge's CPCN for the Township of Cavan Monaghan (RP-2004-0125 / EB-2004-0198) which covers the entire area of the proposed project.</p>

	(Note: The Township of Cavan and the Village of Millbrook, previously part of Durham County, in 1974 became part of Peterborough County, and were amalgamated, along with North Monaghan, into one township - Cavan-Millbrook-North Monaghan - in 1998. In 2007, the township was renamed Cavan Monaghan.)
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 YYYY2, 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 YYYY2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$2,098,225</p> <p>Please refer to Schedule YYYY2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$95,374</p> <p>Please refer to Schedule YYYY2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$5.92</p> <p>Please refer to Schedule YYYY2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule YYYY2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

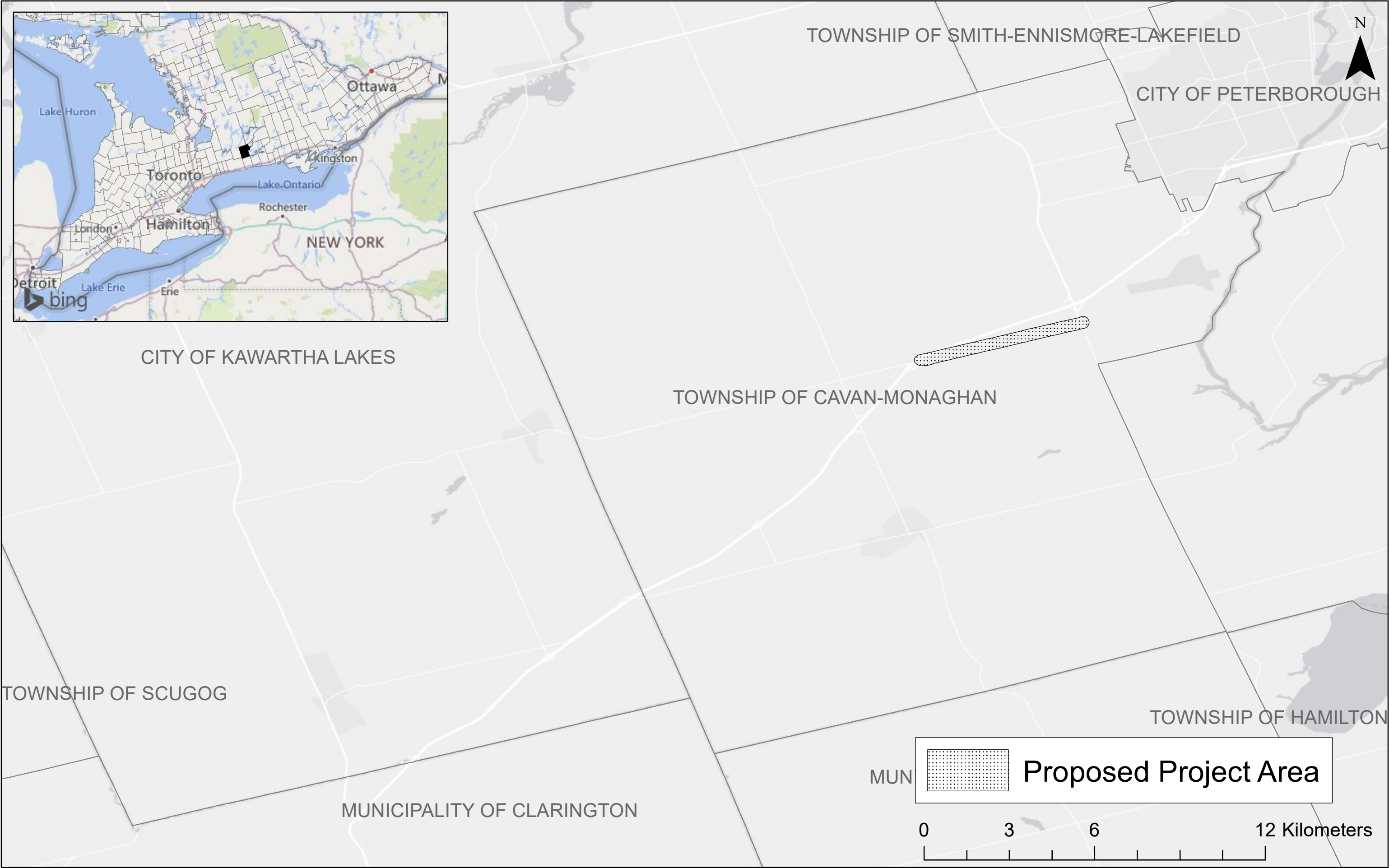
Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</p> <p>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).</p> <p>Please refer to Schedule YYYY2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule YYYY2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule YYYY4.</p>

Schedule YYYY1
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ MD)

Cavan Monaghan 3



Schedule YYYY2
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ MD)

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		4	3	1	1	1	1	1	1	1	1	15
Commercial	Firm		-	2	1	-	-	-	-	-	-	-	3
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	1	-	-	-	-	-	-	-	-	1
Industrial	Firm		-	2	1	-	-	-	-	-	-	-	3
Total Customers			<u>4</u>	<u>8</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>22</u>
Cumulative Customers			4	12	15	16	17	18	19	20	21	22	

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

<u>Customer Type</u>	<u>Project Year</u>	<u>Annual Volumes - m3</u>										<u>Total</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		4,800	13,200	18,000	20,400	22,800	25,200	27,600	30,000	32,400	34,800	229,200
Commercial		-	3,700	8,600	9,800	9,800	9,800	9,800	9,800	9,800	9,800	80,900
Institutional		-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	85,000
Industrial		-	100,000	250,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	2,450,000
Total Volumes		<u>4,800</u>	<u>121,900</u>	<u>286,600</u>	<u>340,200</u>	<u>342,600</u>	<u>345,000</u>	<u>347,400</u>	<u>349,800</u>	<u>352,200</u>	<u>354,600</u>	<u>2,845,100</u>

<u>Customer Type</u>	<u>Project Year</u>	<u>Cumulative Volumes - m3</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		4,800	18,000	36,000	56,400	79,200	104,400	132,000	162,000	194,400	229,200
Commercial		-	3,700	12,300	22,100	31,900	41,700	51,500	61,300	71,100	80,900
Institutional		-	-	-	-	-	-	-	-	-	-
Agricultural		-	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000
Industrial		-	100,000	350,000	650,000	950,000	1,250,000	1,550,000	1,850,000	2,150,000	2,450,000
Total Volumes		<u>4,800</u>	<u>126,700</u>	<u>413,300</u>	<u>753,500</u>	<u>1,096,100</u>	<u>1,441,100</u>	<u>1,788,500</u>	<u>2,138,300</u>	<u>2,490,500</u>	<u>2,845,100</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

\$2,098,225

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$95,374

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

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$5.92

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	841	9,282	20,148	23,624	24,045	24,465	24,886	25,306	25,727	26,147	\$204,472
SES Revenue		1,104	28,037	65,918	78,246	78,798	79,350	79,902	80,454	81,006	81,558	654,373
Total Distribution Charge	\$	1,945	37,319	86,066	101,870	102,843	103,815	104,788	105,760	106,733	107,705	\$858,845

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 YYYY3
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ MD)

Section 3.4 Cavan Monaghan - _____ (MD)

Total Forecasted Customers

22

Penetration Rate

65%

EB-2019-0255

Schedule YYYY3

Redacted

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	\$ 3,050	\$ 1,481	\$ 1,570	\$ 7,252	7.2	-2.7	33	(12)
Electricity F/A	2	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 1,399	0.6	3.9	1	8
Electricity Baseboard	3	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 1,865	0.6	3.9	2	10
Propane	10	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 2,743	5.6	-1.1	54	(11)
Wood	2	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	1	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	22	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 13,259	13.9	4.1	90	(5)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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 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 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 YYYY4
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ MD)

**Cavan Monaghan - _____ (MD) Community Expansion Project
Pipeline Construction Schedule**

[illegible]

Schedule YYYY5
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ MD)



June 1, 2020

Mark Wilson
Enbridge Gas Inc.
Senior Advisor, Municipal and Stakeholder Relations
500 Consumers Road
Toronto, ON
M2J 1P8

Dear Mr. Wilson,

Re: Expression of Support for Natural Gas Expansion in the Township of Cavan Monaghan

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 Cavan Monaghan, I would like to formally express our interest to have unserved areas of the Township, as identified by Enbridge Gas, included on the list of projects Enbridge Gas proposes to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program. The Council has requested that Enbridge consider

[REDACTED] These are as per the attached plans. The Township requests that you consider the attached alternatives for servicing in lieu of your original proposed areas..

Based on the Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may include support for projects 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.

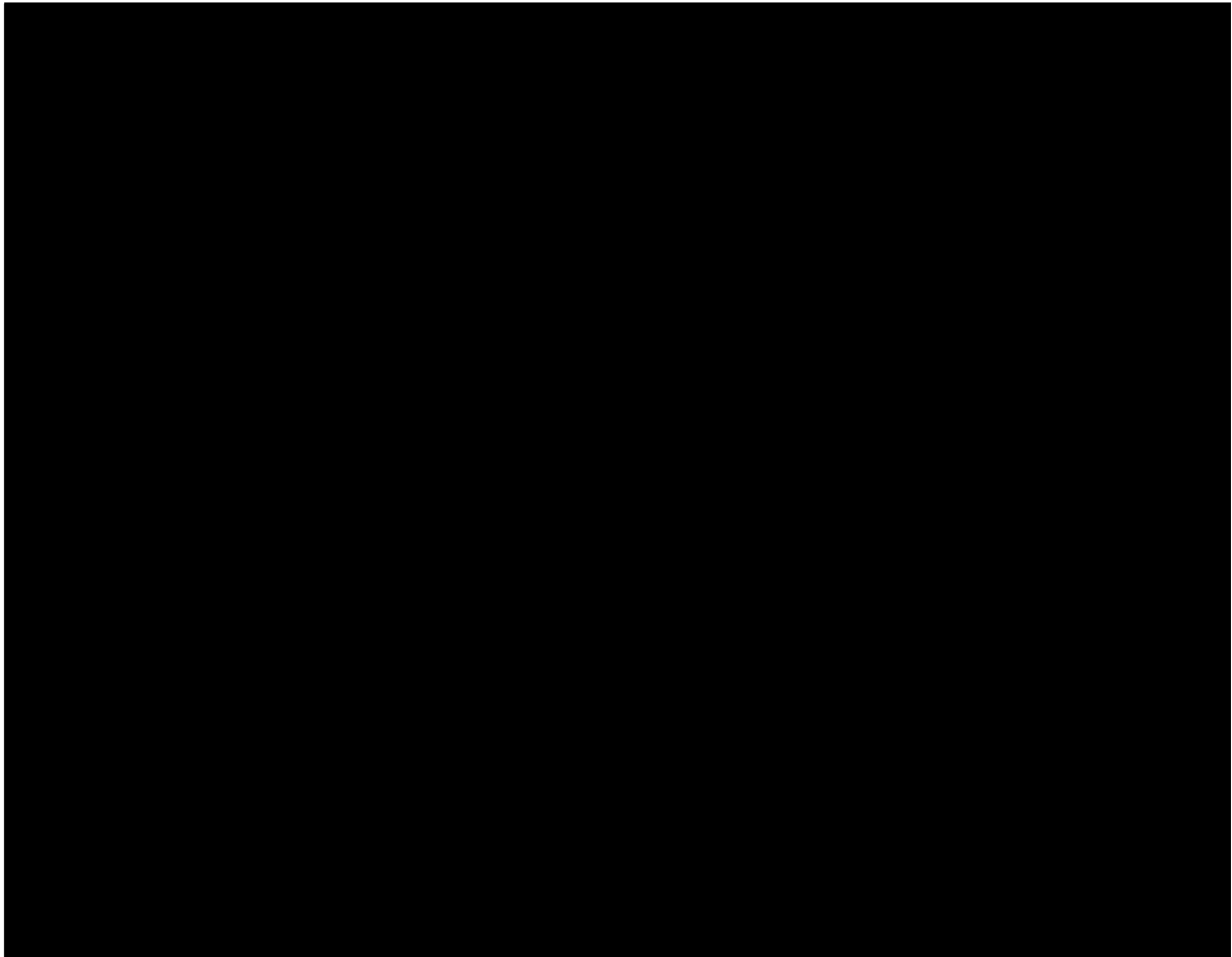
Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help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

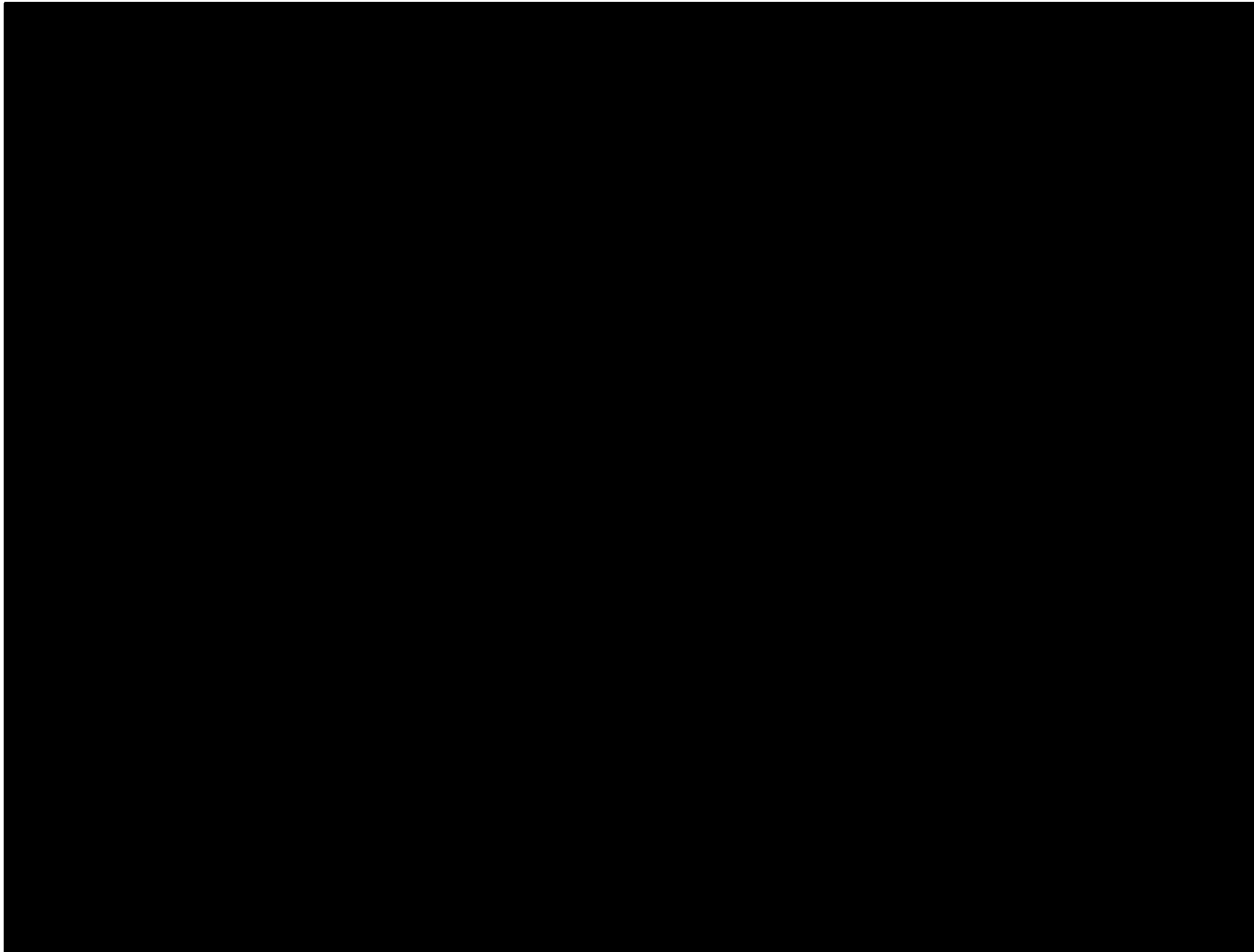
Sincerely,


Scott McFadden, Mayor
Township of Cavan Monaghan
705-201-1026
mayor@cavanmonaghan.net

988 County Road 10
Millbrook, Ontario L0A 1G0
www.cavanmonaghan.net

Phone: (705) 932-2929
Fax: (705) 932-3458
Email: services@cavanmonaghan.net







Schedule YYYY6
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ MD)

Ontario Energy
Board

Commission de l'Énergie
de l'Ontario



RP-2004-0125

EB-2004-0198

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 Cavan-Millbrook-North Monaghan.

This certificate replaces the certificates of the former municipalities that are now within the Township of Cavan-Millbrook-North Monaghan.

DATED at Toronto, July 16, 2004.

ONTARIO ENERGY BOARD

Peter H. O'Dell
Acting Board Secretary

Schedule *ZZZZ*
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ SL)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <u>Cavan Monaghan – _____</u> (SL) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent's Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service within the Township of Cavan Monaghan along _____. The proposed facilities will provide access to natural gas to a forecasted 28 customers (23 residential and 5 commercial / institutional).

The proposed project will tie-in to an existing station at the intersection of _____ and _____. The existing station will require a rebuild in order to accommodate the additional customers and a small amount of the inlet piping to the station requires looping. The proposed distribution system will run along _____ from the tie-in and ends at _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	6,651
Steel	2	9

Please refer to Schedule ZZZZ1 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 ZZZZ2, Table 3.2.

3.3

Provide the annual and cumulative forecast of volumes (in m³) 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 m³ 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 ZZZZ2, Table 3.3.

3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule ZZZZ3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule ZZZZ4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule ZZZZ5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule ZZZZ6 for Enbridge's CPCN for the Township of Cavan Monaghan (RP-2004-0125 / EB-2004-0198) which covers the entire area of the proposed project.</p>

	<p>(Note: The Township of Cavan and the Village of Millbrook, previously part of Durham County, in 1974 became part of Peterborough County, and were amalgamated, along with North Monaghan, into one township - Cavan-Millbrook-North Monaghan - in 1998. In 2007, the township was renamed Cavan Monaghan.)</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 ZZZZ2, 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 ZZZZ2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$3,632,641</p> <p>Please refer to Schedule ZZZZ2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$129,737</p> <p>Please refer to Schedule ZZZZ2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$43.35</p> <p>Please refer to Schedule ZZZZ2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule ZZZZ2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule ZZZZ2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule ZZZZ2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule ZZZZ4.</p>

Schedule ZZZZ1
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ SL)

Cavan Monaghan 2



Schedule *ZZZZ2*
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ SL)

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		7	5	3	2	1	1	1	1	1	1	23
Commercial	Firm		-	3	1	-	-	-	-	-	-	-	4
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	1	-	-	-	-	-	-	-	-	1
Industrial	Firm		-	-	-	-	-	-	-	-	-	-	-
Total Customers			<u>7</u>	<u>9</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>28</u>
Cumulative Customers			7	16	20	22	23	24	25	26	27	28	

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		8,400	22,800	32,400	38,400	42,000	44,400	46,800	49,200	51,600	54,000	390,000
Commercial		-	8,700	18,600	19,800	19,800	19,800	19,800	19,800	19,800	19,800	165,900
Institutional		-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	85,000
Industrial		-	-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>8,400</u>	<u>36,500</u>	<u>61,000</u>	<u>68,200</u>	<u>71,800</u>	<u>74,200</u>	<u>76,600</u>	<u>79,000</u>	<u>81,400</u>	<u>83,800</u>	<u>640,900</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		8,400	31,200	63,600	102,000	144,000	188,400	235,200	284,400	336,000	390,000
Commercial		-	8,700	27,300	47,100	66,900	86,700	106,500	126,300	146,100	165,900
Institutional		-	-	-	-	-	-	-	-	-	-
Agricultural		-	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000
Industrial		-	-	-	-	-	-	-	-	-	-
Total Volumes		<u>8,400</u>	<u>44,900</u>	<u>105,900</u>	<u>174,100</u>	<u>245,900</u>	<u>320,100</u>	<u>396,700</u>	<u>475,700</u>	<u>557,100</u>	<u>640,900</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	\$	3,632,641
--	----	-----------

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	\$	Year 10 <u>129,737</u>
---	----	---

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

Section 36.2 Funding Amount Per Volume (m3)	\$	Year 10 <u>43.35</u>
---	----	---

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	1,472	6,671	11,554	13,131	13,762	14,182	14,603	15,024	15,444	15,865	\$ 121,707
SES Revenue		1,932	8,395	14,030	15,686	16,514	17,066	17,618	18,170	18,722	19,274	147,407
Total Distribution Charge	\$	<u>3,404</u>	<u>15,066</u>	<u>25,584</u>	<u>28,817</u>	<u>30,276</u>	<u>31,248</u>	<u>32,221</u>	<u>33,194</u>	<u>34,166</u>	<u>35,139</u>	\$ <u>269,114</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 ZZZZ3
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ SL)

Section 3.4 Cavan Monaghan - _____ (SL)

Total Forecasted Customers 28 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	6	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 9,230	7.2	-2.7	42	(16)
Electricity F/A	3	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 1,780	0.6	3.9	1	10
Electricity Baseboard	3	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 2,374	0.6	3.9	2	13
Propane	12	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 3,491	5.6	-1.1	69	(13)
Wood	3	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	1	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	28	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 16,875	13.9	4.1	114	(6)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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 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 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 ZZZZ4
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ SL)

Cavan Monaghan - _____ (SL) Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule ZZZZ5
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ SL)



June 1, 2020

Mark Wilson
Enbridge Gas Inc.
Senior Advisor, Municipal and Stakeholder Relations
500 Consumers Road
Toronto, ON
M2J 1P8

Dear Mr. Wilson,

Re: Expression of Support for Natural Gas Expansion in the Township of Cavan Monaghan

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 Cavan Monaghan, I would like to formally express our interest to have unserved areas of the Township, as identified by Enbridge Gas, included on the list of projects Enbridge Gas proposes to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program. The Council has requested that Enbridge consider

[REDACTED] These are as per the attached plans. The Township requests that you consider the attached alternatives for servicing in lieu of your original proposed areas..

Based on the Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may include support for projects 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.

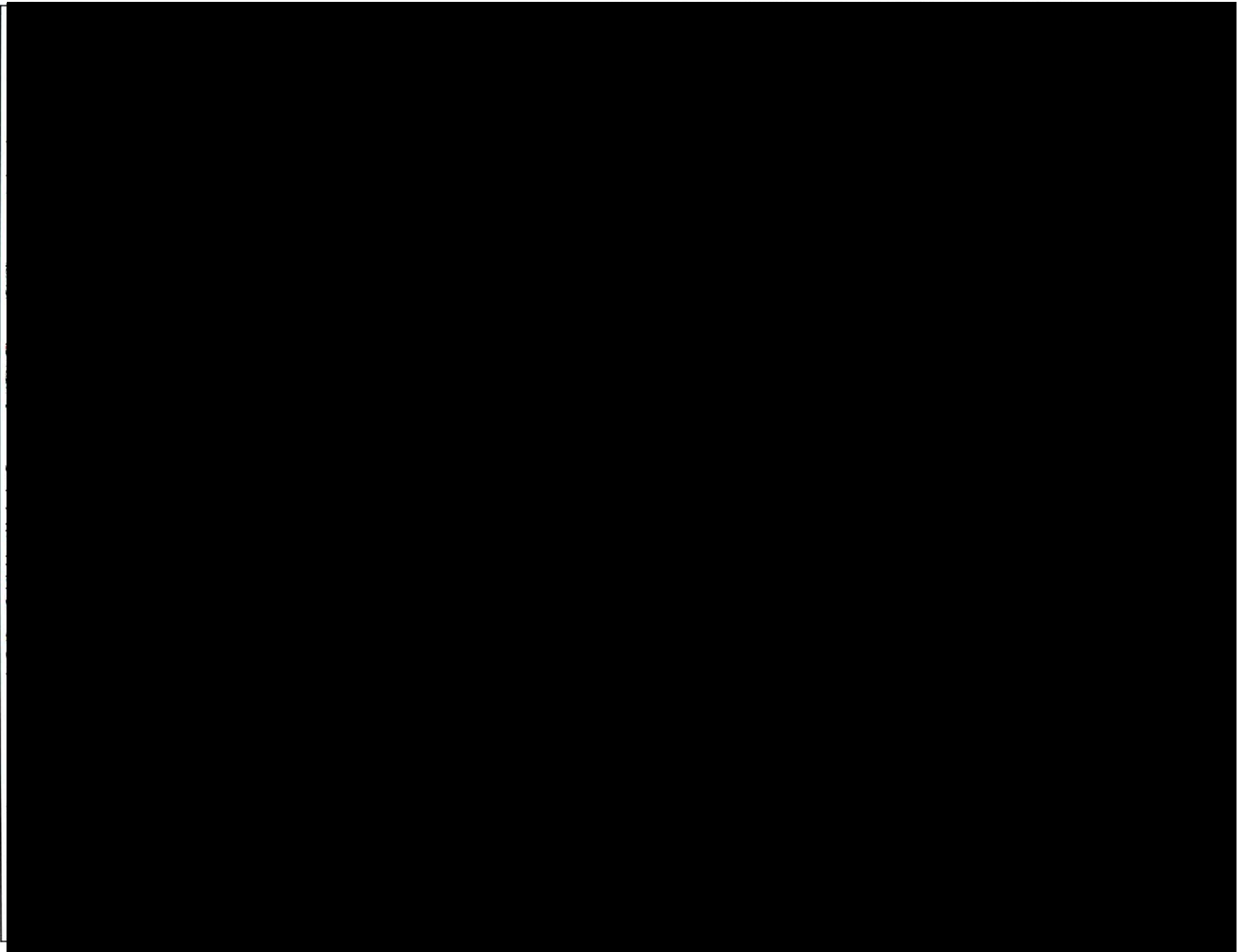
Natural gas is the most common, affordable heating fuel in Ontario. We fully support the efforts of Enbridge Gas Inc., the OEB and the Ministry of Energy, Northern Development and Mines. We look forward to working together to expand natural gas access in our community to attract new opportunities, help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

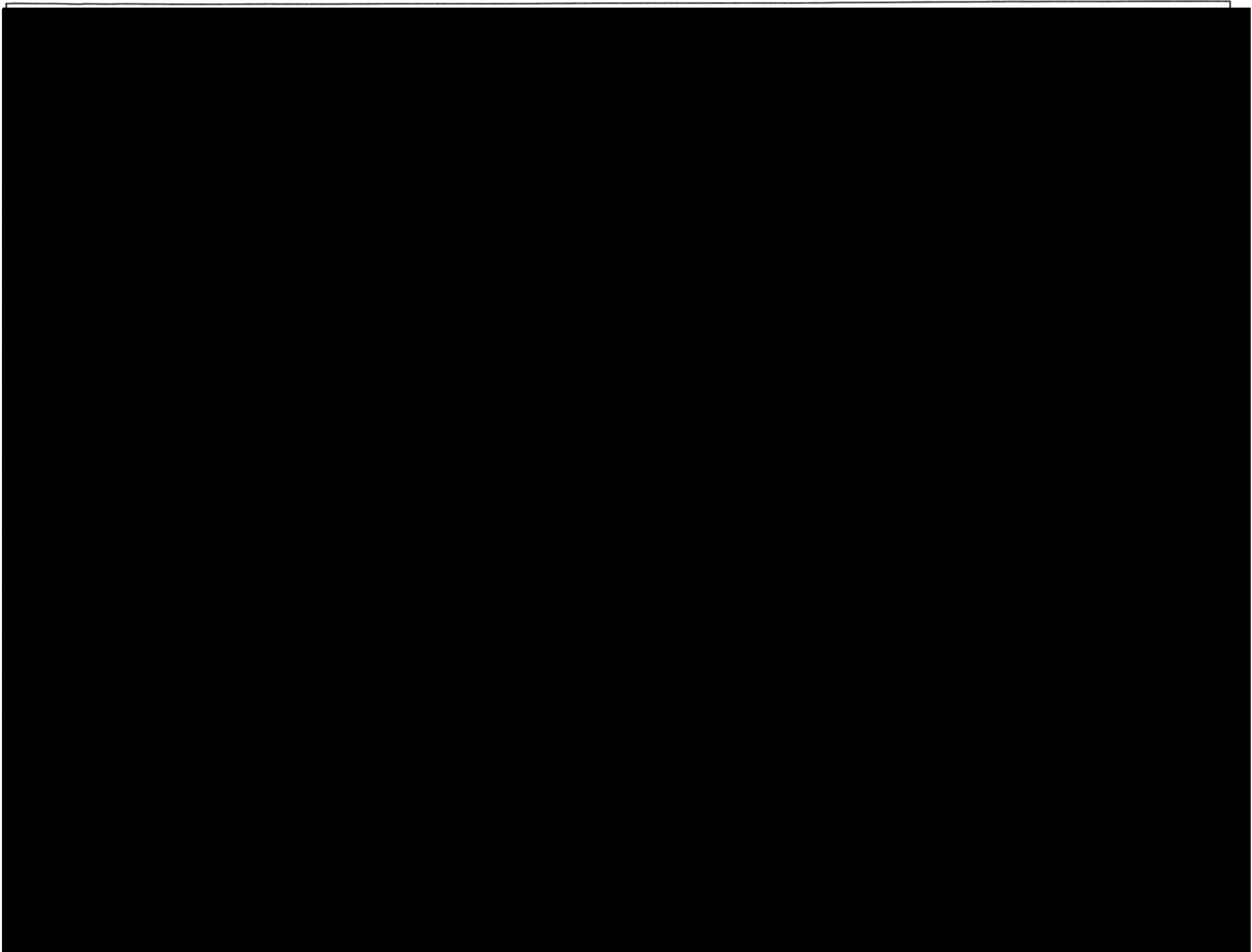
Sincerely,

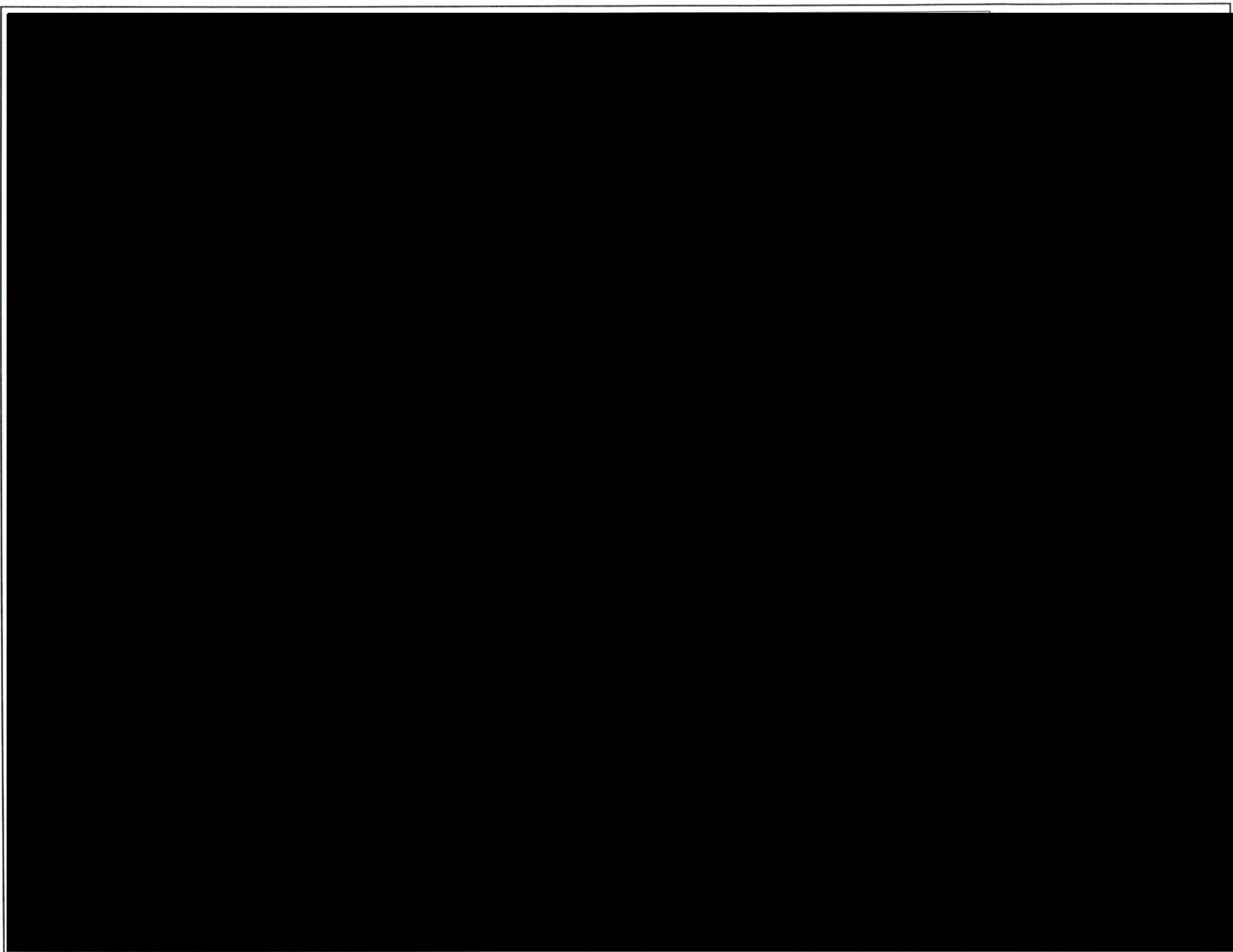

Scott McFadden, Mayor
Township of Cavan Monaghan
705-201-1026
mayor@cavanmonaghan.net

988 County Road 10
Millbrook, Ontario L0A 1G0
www.cavanmonaghan.net

Phone: (705) 932-2929
Fax: (705) 932-3458
Email: services@cavanmonaghan.net







Schedule ZZZZ6
Enbridge Gas Community Expansion Project Proposal

Cavan Monaghan (_____ SL)



RP-2004-0125

EB-2004-0198

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 Cavan-Millbrook-North Monaghan.

This certificate replaces the certificates of the former municipalities that are now within the Township of Cavan-Millbrook-North Monaghan.

DATED at Toronto, July 16, 2004.

ONTARIO ENERGY BOARD

Peter H. O'Dell
Acting Board Secretary

Schedule 5A
Enbridge Gas Community Expansion Project Proposal
East Gwillimbury (North)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: East Gwillimbury (North and East) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 extend service within the Town of East Gwillimbury to serve the northern portion of the community. The proposed facilities will provide access to natural gas to a forecasted 422 customers (391 residential, 22 commercial / institutional and 9 industrial).

The proposed project will tie-in to the existing system at _____ and _____ and run _____ along _____ to _____ (inclusive of subdivision off _____). The proposed project will tie-in to the existing system at the intersection of _____ and _____ to provide gas service along _____, _____, _____ and tie-in to the existing system at the intersection of _____ and _____.

The proposed project will tie-in to the existing system at the intersection of _____ and _____ and run along _____ to _____. The proposed project will tie-in to the existing system on _____ of _____, and run _____ along _____ to _____.

An additional small segment is proposed along _____ between _____ and _____. Some additional small segments of distribution piping are proposed in the community of Holland Landing to expand the distribution system along _____ of _____, _____ and _____, and along _____ at _____.

Three stations are proposed to cut the existing high pressure system down to distribution pressure to serve the community. These stations are located at the intersection of _____ and _____, _____ of the intersection of _____ and _____, and at the intersection of _____ and _____.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	23,950
Polyethylene	4	6187

Please refer to Schedule 5A-1 for Project Map.

3.2	<p>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.</p> <p>Please refer to Schedule 5A-2, Table 3.2.</p>
3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule 5A-2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5A-3, Table 3.4.</p>

3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule 5A-4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule 5A-5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5A-6 for Enbridge's CPCN for the Town of East Gwillimbury (FBC 108) which covers the entire area of the proposed project.</p> <p>(Note: The Town of East Gwillimbury was formed by the amalgamation of the Township of East Gwillimbury with all the previously incorporated villages and hamlets within the township.)</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>

4.2	<p>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).</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 5A-2, Table 4.2.</p>														
4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</p> <table border="1"> <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 border="1"> <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 5A-2, 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															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$8,373,365</p> <p>Please refer to Schedule 5A-2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$19,842</p> <p>Please refer to Schedule 5A-2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$4.37</p> <p>Please refer to Schedule 5A-2, Table 5.3.</p>

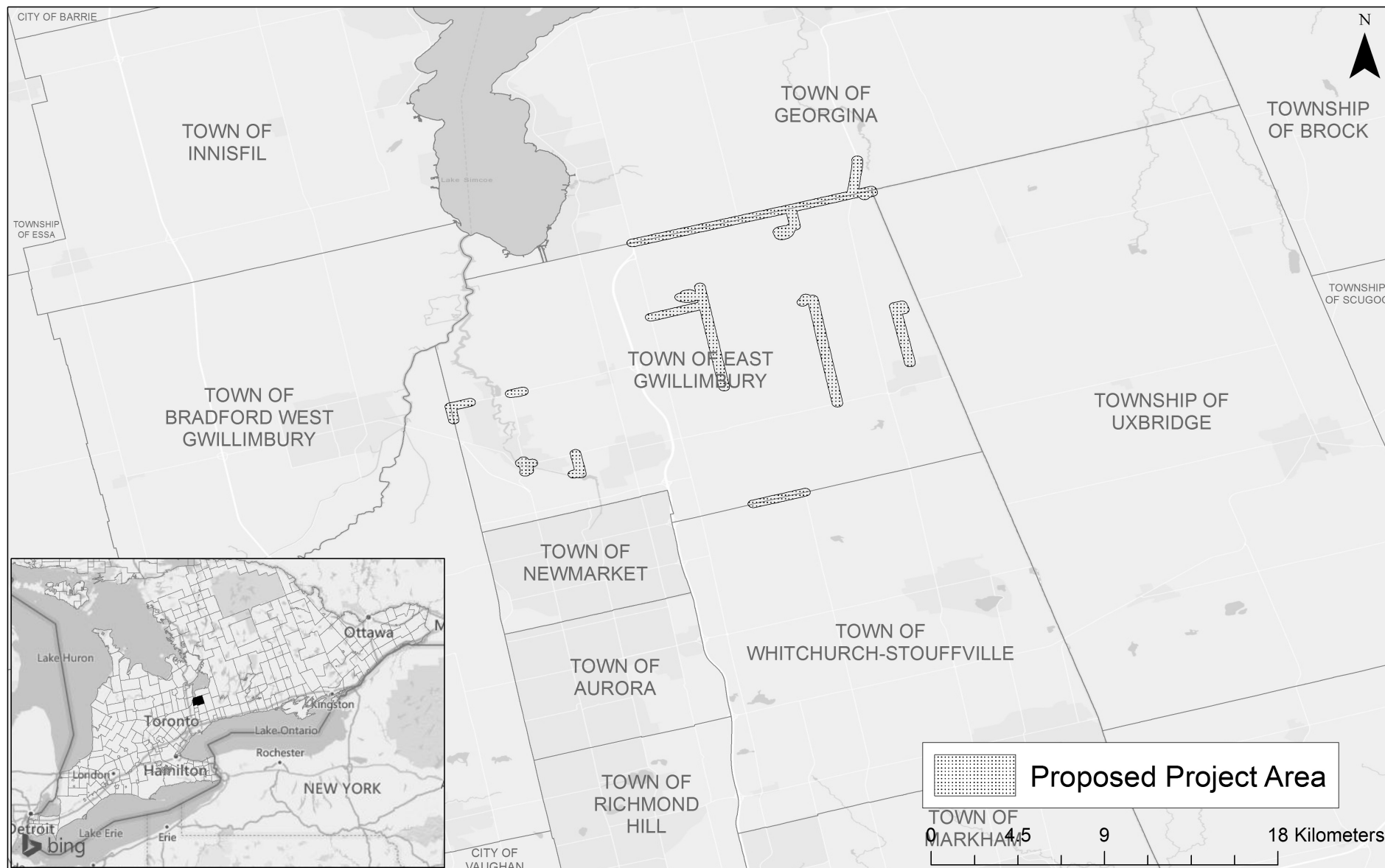
Part VI – Distribution Charge	
6.1	<p>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule 5A-2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule 5A-2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule 5A-2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule 5A-4.</p>

Schedule 5A-1
Enbridge Gas Community Expansion Project Proposal
East Gwillimbury (North)

East Gwillimbury



Schedule 5A-2
Enbridge Gas Community Expansion Project Proposal
East Gwillimbury (North)

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		106	94	35	25	20	24	21	24	22	20	391
Commercial	Firm		-	10	3	2	2	2	-	-	-	-	19
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	2	1	-	-	-	-	-	-	-	3
Industrial	Firm		-	3	2	2	1	1	-	-	-	-	9
Total Customers			<u>106</u>	<u>109</u>	<u>41</u>	<u>29</u>	<u>23</u>	<u>27</u>	<u>21</u>	<u>24</u>	<u>22</u>	<u>20</u>	<u>422</u>
Cumulative Customers			106	215	256	285	308	335	356	380	402	422	

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		127,200	367,200	522,000	594,000	648,000	700,800	754,800	808,800	864,000	914,400	6,301,200
Commercial		-	18,400	41,700	50,300	57,700	65,100	68,800	68,800	68,800	68,800	508,400
Institutional		-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	11,200	27,400	32,400	32,400	32,400	32,400	32,400	32,400	32,400	265,400
Industrial		-	150,000	400,000	600,000	750,000	850,000	900,000	900,000	900,000	900,000	6,350,000
Total Volumes		<u>127,200</u>	<u>546,800</u>	<u>991,100</u>	<u>1,276,700</u>	<u>1,488,100</u>	<u>1,648,300</u>	<u>1,756,000</u>	<u>1,810,000</u>	<u>1,865,200</u>	<u>1,915,600</u>	<u>13,425,000</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		127,200	494,400	1,016,400	1,610,400	2,258,400	2,959,200	3,714,000	4,522,800	5,386,800	6,301,200
Commercial		-	18,400	60,100	110,400	168,100	233,200	302,000	370,800	439,600	508,400
Institutional		-	-	-	-	-	-	-	-	-	-
Agricultural		-	11,200	38,600	71,000	103,400	135,800	168,200	200,600	233,000	265,400
Industrial		-	150,000	550,000	1,150,000	1,900,000	2,750,000	3,650,000	4,550,000	5,450,000	6,350,000
Total Volumes		<u>127,200</u>	<u>674,000</u>	<u>1,665,100</u>	<u>2,941,800</u>	<u>4,429,900</u>	<u>6,078,200</u>	<u>7,834,200</u>	<u>9,644,200</u>	<u>11,509,400</u>	<u>13,425,000</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	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

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	\$ 8,373,365
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Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<u><u>Year 10</u></u> \$ 19,842
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Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)	<u><u>Year 10</u></u> \$ 4.37
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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	\$	22,289	79,156	128,589	154,902	174,239	190,835	203,969	213,431	223,104	231,935	\$ 1,622,449
SES Revenue		29,256	125,764	227,953	293,641	342,263	379,109	403,880	416,300	428,996	440,588	3,087,750
Total Distribution Charge	\$	<u>51,545</u>	<u>204,920</u>	<u>356,542</u>	<u>448,543</u>	<u>516,502</u>	<u>569,944</u>	<u>607,849</u>	<u>629,731</u>	<u>652,100</u>	<u>672,523</u>	<u>\$ 4,710,199</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 5A-3
Enbridge Gas Community Expansion Project Proposal
East Gwillimbury (North)

Section 3.4 East Gwillimbury (North and East)

Total Forecasted Customers 422 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	89	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 139,111	7.2	-2.7	636	(237)
Electricity F/A	38	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 26,831	0.6	3.9	22	149
Electricity Baseboard	51	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 35,775	0.6	3.9	30	198
Propane	186	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 52,608	5.6	-1.1	1,038	(202)
Wood	38	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	21	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	422	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 254,325	13.9	4.1	1,725	(92)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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 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 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 5A-4
Enbridge Gas Community Expansion Project Proposal
East Gwillimbury (North)

East Gwillimbury (North and East) Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule 5A-5
Enbridge Gas Community Expansion Project Proposal
East Gwillimbury (North)



Town of
East Gwillimbury

Mike Molinari, P.Eng.

General Manager
Community Infrastructure & Environmental Services
905-478-3814
mmolinari@eastgwillimbury.ca

June 4, 2020

EB-2019-0255
Schedule 5A-5

Steve McGivery – Director GTA East Operations
ENBRIDGE GAS INC.
Technology & Operations Centre
101 Honda Blvd. Markham, Ontario L6C 0M6

Dear Regional Director:

Re: Expression of Support for Natural Gas Expansion to the Town of East Gwillimbury

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 Town of East Gwillimbury, I would like to formally express our interest to have unserved areas in East Gwillimbury West and East Gwillimbury North, as outlined for Enbridge, 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 Guidelines issued by the OEB (EB-2019-0255), we are aware that Enbridge Gas Inc. may 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 dark ink, appearing to read "Mike Molinari". The signature is fluid and cursive, with a horizontal line extending from the end of the name.

Mike Molinari, P.Eng.
General Manager,
Community Infrastructure & Environmental Services

MM/cm

cc: Mark Wilson
Sr. Advisor, Municipal & Stakeholder Relations

Schedule 5A-6
Enbridge Gas Community Expansion Project Proposal
East Gwillimbury (North)

IN THE MATTER OF The Municipal
Franchises Act, Chapter 249
R. S. O. 1950 Section 8 as
amended, and

IN THE MATTER OF an Application
by The Consumers' Gas Company of
Toronto for a certificate of public
convenience and necessity to construct
works and to supply natural gas to the
inhabitants of the Township of East
Gwillimbury in the County of York

B E F O R E:

A. R. Crozier, Chairman	} Monday, the 10th
W. R. Howard, Commissioner	

**CERTIFICATE OF PUBLIC CONVENIENCE
AND NECESSITY**

UPON THE APPLICATION of The Consumers' Gas Company of Toronto (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 10th day of June, 1957, 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 of Toronto for the supply of natural gas to the inhabitants of the Township of East Gwillimbury and for the construction of the works necessary therefor.
2. The Board fixes the costs of this Application at \$10.00 payable forthwith by the Applicant.

DATED at Toronto this 24th day of June 1957.

ONTARIO FUEL BOARD

.....
Chairman

.....
Commissioner

**IN THE MATTER OF The Municipal
Franchises Act, Chapter 249
R. S. O. 1950 Section 8 as
amended, and**

**IN THE MATTER OF an Application
by The Consumers' Gas Company of
Toronto for a certificate of public
convenience and necessity to
construct works and to supply
natural gas to the inhabitants of
the Township of East Gwillimbury
in the County of York**

**CERTIFICATE OF PUBLIC CONVENIENCE
AND NECESSITY**

**ZIDGERMAN, HAYWOOD & TURVILLE
111 Richmond Street West,
TORONTO, Ontario.**

Schedule 5B
Enbridge Gas Community Expansion Project Proposal
Lisle and Tioga

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Lisle and Tioga 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the communities of Lisle and Tioga in the Township of Adjala–Tosorontio. The proposed facilities will provide access to natural gas to a forecasted 367 customers (355 residential, 11 commercial / institutional, and 1 industrial).

The proposed project will tie-in to an existing system on _____ in the community of Everett, approximately _____. At this location, a station is proposed to cut the XHP to distribution pressure for the communities. The proposed facilities run _____ from the tie-in along _____ to _____, picking up services in Tioga along the way. Approximately 18 km of distribution piping is proposed within the communities.

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	9,400

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	17,800

Please refer to Schedule 5B-1 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 5B-2, Table 3.2.

3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule 5B-2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5B-3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule 5B-4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule 5B-5.</p>

3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5B-6 for Enbridge's CPCN for the Township of Adjala-Tosorontio (EBC 246) which covers the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 5B-2, Table 4.2.</p>

4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</p> <table border="1" style="margin: 10px auto; width: 80%;"> <tr> <th>Description</th> <th>Year 1</th> <th>Year 2...</th> <th>Year 10</th> <th>Total</th> </tr> <tr> <td>Revenue Requirement</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <table border="1" style="margin: 10px auto; width: 40%;"> <tr> <th>Description</th> <th>Year 10</th> </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 5B-2, 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															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$9,657,355</p> <p>Please refer to Schedule 5B-2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$26,314</p> <p>Please refer to Schedule 5B-2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$9.27</p> <p>Please refer to Schedule 5B-2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule 5B-2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

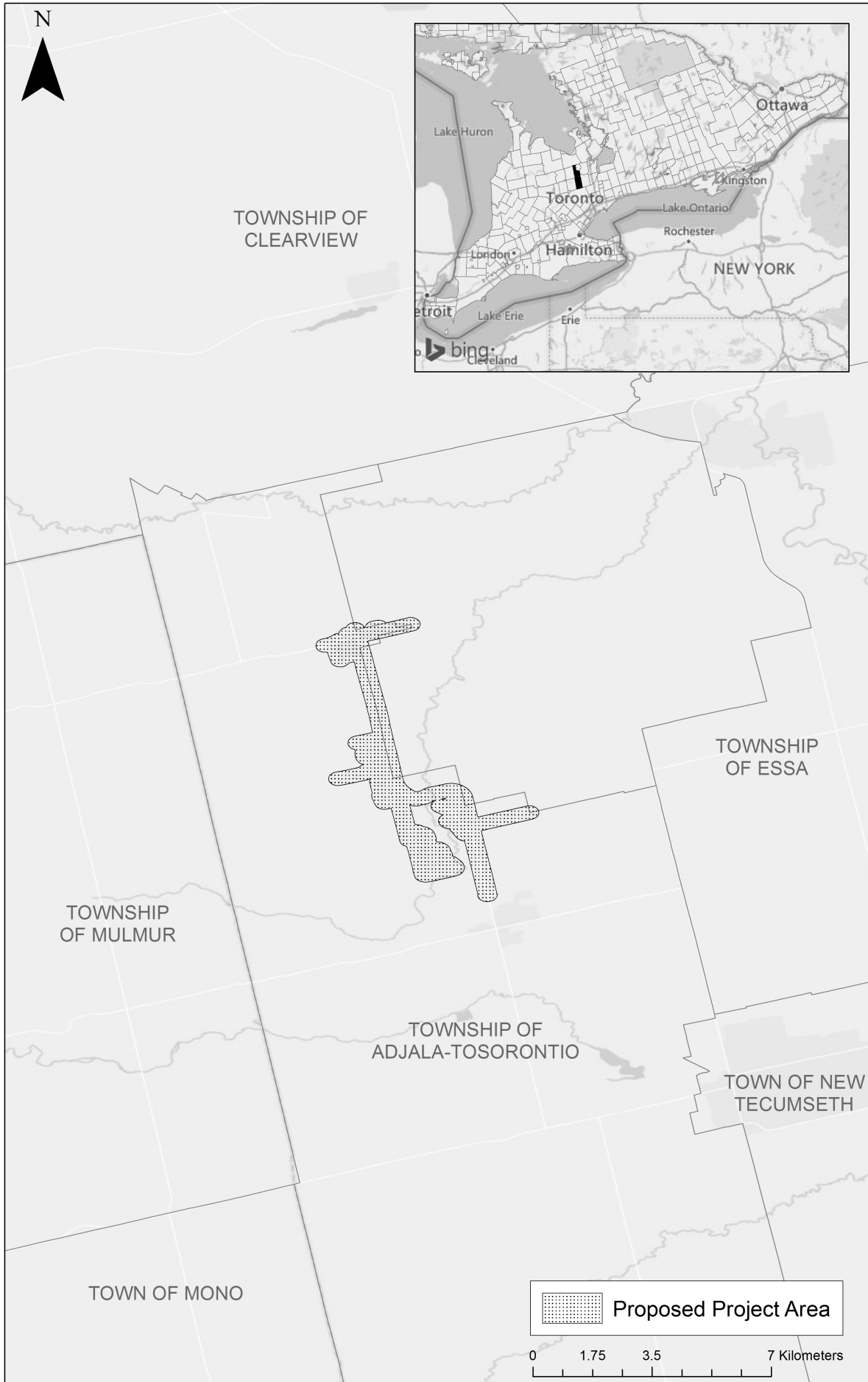
Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>Provide, in a summary table, the expected Profitability Index (PI) of the project, inclusive of the proposed section 36.2 funding. Provide any major assumptions used in the calculation, and specify all proposed section 36.2 funding, revenue from rates (including any proposed system expansion surcharges), capital contributions and municipal tax holidays or other municipal financial support.</p> <p>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).</p> <p>Please refer to Schedule 5B-2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule 5B-2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule 5B-4.</p>

Schedule 5B-1
Enbridge Gas Community Expansion Project Proposal
Lisle and Tioga

Lisle & Tioga

EB-2019-0255
Schedule 5B-1
Redacted



Schedule 5B-2
Enbridge Gas Community Expansion Project Proposal
Lisle and Tioga

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		96	85	32	23	18	22	19	22	20	18	355
Commercial	Firm		-	4	2	1	-	-	-	-	-	-	7
Institutional	Firm		-	1	-	-	-	-	-	-	-	-	1
Agricultural	Firm		-	2	1	-	-	-	-	-	-	-	3
Industrial	Firm		-	1	-	-	-	-	-	-	-	-	1
Total Customers			<u>96</u>	<u>93</u>	<u>35</u>	<u>24</u>	<u>18</u>	<u>22</u>	<u>19</u>	<u>22</u>	<u>20</u>	<u>18</u>	<u>367</u>
Cumulative Customers			96	189	224	248	266	288	307	329	349	367	

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		115,200	332,400	472,800	538,800	588,000	636,000	685,200	734,400	784,800	830,400	5,718,000
Commercial		-	6,100	14,600	18,200	19,400	19,400	19,400	19,400	19,400	19,400	155,300
Institutional		-	25,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	425,000
Agricultural		-	11,200	32,400	42,400	42,400	42,400	42,400	42,400	42,400	42,400	340,400
Industrial		-	50,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	850,000
Total Volumes		<u>115,200</u>	<u>424,700</u>	<u>669,800</u>	<u>749,400</u>	<u>799,800</u>	<u>847,800</u>	<u>897,000</u>	<u>946,200</u>	<u>996,600</u>	<u>1,042,200</u>	<u>7,488,700</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		115,200	447,600	920,400	1,459,200	2,047,200	2,683,200	3,368,400	4,102,800	4,887,600	5,718,000
Commercial		-	6,100	20,700	38,900	58,300	77,700	97,100	116,500	135,900	155,300
Institutional		-	25,000	75,000	125,000	175,000	225,000	275,000	325,000	375,000	425,000
Agricultural		-	11,200	43,600	86,000	128,400	170,800	213,200	255,600	298,000	340,400
Industrial		-	50,000	150,000	250,000	350,000	450,000	550,000	650,000	750,000	850,000
Total Volumes		<u>115,200</u>	<u>539,900</u>	<u>1,209,700</u>	<u>1,959,100</u>	<u>2,758,900</u>	<u>3,606,700</u>	<u>4,503,700</u>	<u>5,449,900</u>	<u>6,446,500</u>	<u>7,488,700</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

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

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

\$9,657,355

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served

Year 10

\$26,314

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

Section 36.2 Funding Amount Per Volume (m3)

Year 10

\$9.27

Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	20,186	66,165	100,755	114,914	124,061	132,472	141,093	149,714	158,546	166,536	\$1,174,441
SES Revenue		26,496	97,681	154,054	172,362	183,954	194,994	206,310	217,626	229,218	239,706	1,722,401
Total Distribution Charge	\$	46,682	163,846	254,809	287,276	308,015	327,466	347,403	367,340	387,764	406,242	\$2,896,842

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 5B-3
Enbridge Gas Community Expansion Project Proposal
Lisle and Tioga

Section 3.4 Lisle and Tioga

Total Forecasted Customers 367 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	77	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 120,980	7.2	-2.7	553	(206)
Electricity F/A	33	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 23,334	0.6	3.9	19	129
Electricity Baseboard	44	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 31,112	0.6	3.9	26	172
Propane	161	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 45,752	5.6	-1.1	902	(176)
Wood	33	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	18	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	367	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 221,178	13.9	4.1	1,500	(80)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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 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 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 5B-4
Enbridge Gas Community Expansion Project Proposal
Lisle and Tioga

Lisle and Tioga Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule 5B-5
Enbridge Gas Community Expansion Project Proposal
Lisle and Tioga



THE CORPORATION OF THE
TOWNSHIP OF ADJALA – TOSORONTIO

7855 Sideroad 30 * Alliston, Ontario * L9R 1V1
Telephone: (705) 434-5055 Fax: (705) 434-5051

Office of the Clerk

May 21, 2020

Dear Ms. Balkanci,

Re: Expression of Support for Natural Gas Expansion in Adjala-Tosorontio

On behalf of the Township of Adjala-Tosorontio, I would like to formally express our interest to have Enbridge Gas include projects that would bring natural Gas to Hockley Village as well as Tioga and Lisle on its list of projects being proposed to the Ontario Energy Board (OEB) for consideration for financial support through the Natural Gas Expansion Program.

The Council of the Township of Adjala-Tosorontio passed the following resolution at their Council meeting held on May 19, 2020.

*Moved By: Councillor Hall-Chancey
Seconded By: Councillor Bays*

Resolved, That Council direct Staff to provide a letter to Enbridge Gas Inc. in support of a Natural Gas Expansion Program project in Hockley Village and a project in Tioga and Lisle.

Carried

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 "R. Reid", is written over the name and title of the signatory.

Robin Reid,
Acting Clerk

cc: Mark Wilson, Sr. Advisor, Municipal & Stakeholder Relations

Schedule 5B-6
Enbridge Gas Community Expansion Project Proposal
Lisle and Tioga



IN THE MATTER OF the Municipal Franchises
Act, R.S.O. 1990, c. M.55;

AND IN THE MATTER OF an Application by
The Consumers' Gas Company Ltd. for a certificate
of public convenience and necessity to construct
works to supply gas and to supply gas to the
inhabitants of the Corporation of the Township of
Adjala-Tosorontio.

BEFORE: P.W. Hardie
Presiding Member

G.A. Dominy
Vice-Chair/Member

C. Elwell
Member

ORDER GRANTING A
CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

The Consumers' Gas Company Ltd. ("Consumers Gas") filed with the Ontario Energy Board ("the Board") an Application dated March 28, 1996 ("the Application") under section 8 of the Municipal Franchises Act, for a certificate of public convenience and necessity to construct works to supply gas and to supply gas in the Township of Adjala-Tosorontio.

The Notice of Application, dated April 12, 1996, was served in accordance with the Board's Letter of Direction. The Board issued Procedural Order No.1 on May 9, 1996 which established a schedule for interrogatories and notified parties of the date and time of the hearing.

The Application was heard in Toronto on June 5, 6 and 17, 1996 in the presence of counsel for Consumers Gas and counsel for Board Staff. The Board issued an oral decision on

- 2 -

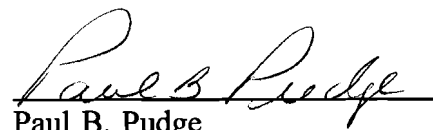
July 4, 1996, finding the Application to be in the public interest. The Board directed that as a condition of granting the order Consumers Gas shall report in its rates cases, on an exception basis, deviations in the contracted volumes for the Honda plant in excess of 20 percent below the volumes forecast in the Company's feasibility analysis, which occur over the 20-year economic feasibility planning horizon.

THE BOARD THEREFORE ORDERS THAT:

1. A Certificate of Public Convenience and Necessity ("the Certificate") is granted to Consumers Gas to construct works to supply gas and to supply gas in the Township of Adjala-Tosorontio.
2. If Consumers Gas should fail 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. The Board's costs shall be paid by Consumers Gas forthwith upon the issuance of the Board's invoice.

ISSUED at Toronto, July 9, 1996.

ONTARIO ENERGY BOARD


Paul B. Pudge
Board Secretary

Schedule 5C
Enbridge Gas Community Expansion Project Proposal

Meaford (_____ SB)

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: <u>Meaford - _____</u> (SB) 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 provide gas distribution service in the _____ area of the Municipality of Meaford. The proposed facilities will provide access to natural gas to a forecasted 134 customers (129 residential and 5 commercial / institutional).

The proposed project will tie-in to an existing 4" polyethylene pipeline near the intersection of _____ and _____.

The proposed distribution pipeline will consist of 9,570 m of 2" polyethylene pipe and 1,800 m of 4" polyethylene pipe. The proposed distribution system will extend _____ along _____ to include _____, _____ and _____ along the _____.

There will be no reinforcement required to accommodate additional loads for the system.

The approximate length and size of the distribution pipelines required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	2	9,570

The approximate length and size of the supply laterals required:

Pipe Type	Diameter (NPS)	Length (m)
Polyethylene	4	1,800

Please refer to Schedule 5C-1 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 5C-2, Table 3.2.

3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule 5C-2, Table 3.3.</p>
3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5C-3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule 5C-4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule 5C-5.</p>

3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5C-6 for Enbridge's CPCN with the Municipality of Meaford (EB-2008-0092) which covers the entire area of the proposed project.</p>
Part IV – Cost of Project	
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>
4.2	<p>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).</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 5C-2, 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 5C-2, Table 4.3.

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$5,346,148</p> <p>Please refer to Schedule 5C-2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$39,897</p> <p>Please refer to Schedule 5C-2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$23.28</p> <p>Please refer to Schedule 5C-2, Table 5.3.</p>

Part VI – Distribution Charge	
6.1	<p>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.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule 5C-2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule 5C-2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule 5C-2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct • System Expansion Surcharge (SES) rate approval (subject to OEB determinations in the EB-2020-0094 harmonization proceeding)
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule 5C-4.</p>

Schedule 5C-1
Enbridge Gas Community Expansion Project Proposal

Meaford (_____ SB)

Meaford



Schedule 5C-2
Enbridge Gas Community Expansion Project Proposal

Meaford (_____ SB)

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>
	37	32	12	8	6	8	6	8	6	6	129
	-	2	2	-	-	-	-	-	-	-	4
	-	-	-	-	-	-	-	-	-	-	-
	-	1	-	-	-	-	-	-	-	-	1
	-	-	-	-	-	-	-	-	-	-	-
	<u>37</u>	<u>35</u>	<u>14</u>	<u>8</u>	<u>6</u>	<u>8</u>	<u>6</u>	<u>8</u>	<u>6</u>	<u>6</u>	<u>134</u>
	37	72	86	94	100	108	114	122	128	134	

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>
	30,773	88,385	125,290	142,065	153,808	165,550	177,293	189,035	200,778	210,843	1,483,818
	-	2,200	6,600	8,800	8,800	8,800	8,800	8,800	8,800	8,800	70,400
	-	-	-	-	-	-	-	-	-	-	-
	-	5,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	85,000
	-	-	-	-	-	-	-	-	-	-	-
	<u>30,773</u>	<u>95,585</u>	<u>141,890</u>	<u>160,865</u>	<u>172,608</u>	<u>184,350</u>	<u>196,093</u>	<u>207,835</u>	<u>219,578</u>	<u>229,643</u>	<u>1,639,218</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>	
	30,773	119,158	244,448	386,513	540,320	705,870	883,163	1,072,198	1,272,975	1,483,818	
	-	2,200	8,800	17,600	26,400	35,200	44,000	52,800	61,600	70,400	
	-	-	-	-	-	-	-	-	-	-	
	-	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000	
	-	-	-	-	-	-	-	-	-	-	
	<u>30,773</u>	<u>126,358</u>	<u>268,248</u>	<u>429,113</u>	<u>601,720</u>	<u>786,070</u>	<u>982,163</u>	<u>1,189,998</u>	<u>1,409,575</u>	<u>1,639,218</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	\$ 5,346,148
--	-----------------

Table 5.2 - Section 36.2 Funding Amount Per Customer Served

Section 36.2 Funding Amount Per Customer Served	<u>Year 10</u> \$ 39,897
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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> \$ 23.28
---	-------------------------------

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	\$	5,746	17,066	24,833	28,270	30,447	32,624	34,801	36,979	39,156	41,022	\$ 290,943
SES Revenue		7,078	21,985	32,635	36,999	39,700	42,401	45,101	47,802	50,503	52,818	377,020
Total Distribution Charge	\$	<u>12,824</u>	<u>39,051</u>	<u>57,467</u>	<u>65,269</u>	<u>70,147</u>	<u>75,025</u>	<u>79,903</u>	<u>84,781</u>	<u>89,659</u>	<u>93,840</u>	<u>\$ 667,963</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 5C-3
Enbridge Gas Community Expansion Project Proposal

Meaford (_____ SB)

Section 3.4 Meaford - _____ (SB)

Total Forecasted Customers 134 Penetration Rate 56%

	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	3	2%	\$ 5,000	\$ 2,829	\$ 1,258	\$ 1,571	\$ 5,198	6.7	-2.5	22	(8)
Electricity F/A	10	7%	\$ 5,000	\$ 2,028	\$ 1,258	\$ 770	\$ 7,647	0.5	3.6	5	36
Electricity Baseboard	17	12%	\$ 12,000	\$ 1,626	\$ 1,258	\$ 368	\$ 6,087	0.5	3.6	9	59
Propane	91	68%	\$ 600	\$ 1,626	\$ 1,258	\$ 368	\$ 33,476	5.2	-1.1	472	(96)
Wood	7	5%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	7	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	134	100%	\$ 31,100	\$ 8,109	\$ 5,031	\$ 3,077	\$ 52,407	12.9	3.6	508	(10)

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 5C-4
Enbridge Gas Community Expansion Project Proposal

Meaford (_____ SB)

Meaford - _____ (SB) Community Expansion Project

Pipeline Construction Schedule

[illegible]

Schedule 5C-5
Enbridge Gas Community Expansion Project Proposal

Meaford (_____ SB)



Municipality of Meaford
21 Trowbridge Street West
Meaford ON, N4L 1A1
519-538-1060

EB-2019-0255
Schedule 5C-5(a)
Redacted

May 26, 2020

Brian Lennie
Senior Advisor, Municipal Affairs & Stakeholder Relations
Ontario South/West
Enbridge Gas Inc.
Via email brian.lennie@enbridge.com

Dear Mr. Lennie,

Re: Municipality of Meaford Resolution regarding the Provincial Natural Gas Expansion Program for [REDACTED]

At their meeting on May 25, 2020, the Council of the Municipality of Meaford passed the following resolution regarding the provincial natural gas expansion program for [REDACTED]:

Moved by: Deputy Mayor Keaveney
Seconded by: Councillor Bartley

That Council of the Municipality of Meaford:

1. Supports the application by Enbridge Gas Inc. to the Province of Ontario's Natural Gas Expansion Program for [REDACTED], and
2. Declines to provide financial support to the project through the Incremental Tax Equivalent program.

Carried Resolution #2020-10-03



Municipality of Meaford

21 Trowbridge Street West

Meaford ON, N4L 1A1

519-538-1060

Sincerely,

Barb Clumpus

Mayor

Municipality of Meaford

21 Trowbridge Street West, Meaford

bclumpus@meaford.ca



Date Monday, May 25, 2020

From Rob Armstrong, CAO / Director of Development Services

Subject **Enbridge Gas Line Request for Support –**
[REDACTED]

Report No. CAO2020-07 **Roll No.** N/a

Recommendation

That Council of the Municipality of Meaford:

1. Supports the application by Enbridge Gas Inc. to the Province of Ontario's Natural Gas Expansion Program for [REDACTED], and
2. Declines to provide financial support to the project through the Incremental Tax Equivalent program.

Background

The Municipality of Meaford is in receipt of a request from Enbridge Gas Inc. to provide a letter of support for an application to the Province of Ontario's Natural Gas Expansion Program (Appendix 1). In addition to the letter of support they are seeking the Municipalities financial commitment to an Incremental Tax Equivalent (ITE) grant. This program is similar to the Municipal Incremental Tax Equivalent grant under the Community Improvement Program wherein an increase in property taxes that would be a direct result from an improvement to property is waived for the property owner for a period of time. In this case, the improvement is provision of natural gas and Enbridge is suggesting 10 years. The following is the summary provided by Enbridge on the program:

In general, the incremental tax equivalent (ITE) is revenue neutral for Municipality for the first 10 years, and is cash flow positive for years 11 – 40 as the Municipality will get the incremental property tax for the last 30 years of forecasted asset life (and beyond).

This amount for the first 10 years will be calculated to match the money Enbridge will pay you, less the federal, provincial payments required.

It will equal the amount that would go directly to the Municipality, so no money out of the Municipal budget is required.

It is staff's understanding that a similar proposal came before the Municipality in 2017 through Union Gas, but this project did not receive the necessary Provincial Approval to proceed. Staff are unaware of any financial commitment being made at that time under that program.

Analysis

Municipal staff support any program that introduces additional services to our residents that would assist them in reducing heating costs. If approved, the installation of services would occur on both public and private roads. Any services on public roads would need to be installed in accordance with the municipal Engineering Standards.

Staff are however concerned with the cost to administer the ITE for those properties that would see an increase in assessment. It is acknowledged that an increase in taxes resulting from increased assessment does not result in an impact on the current budget.

The representative from Enbridge has also confirmed that municipal support does not have to include financial commitment.

This report is required to go directly to Council in that the deadline for applications is June 3, 2020.

Financial Impact

Although Enbridge is suggesting that there would be no negative impact on the budget in that this would be an in-and-out process there would be staff costs associated with administering the ITE. Moreover current staffing levels would struggle to take on more tax analysis at this time. Should the ITE be granted, Financial Services would either require more staff or would need to reduce existing service levels to accommodate the analysis required to administer the program.

Implications

Other than staff costs to administer the ITE and the loss of revenue from waiving increased taxes, no adverse implications are anticipated with this support.

Strategic Priorities

This report supports the mission, vision and values of the Municipality of Meaford, as well as the goals and objectives set out in Council's Strategic Priorities, particularly with respect to:

- Leading Municipal Government
- Strengthening our Community

Consultation and Communications

Senior Management

Enbridge Gas Inc.

Conclusion

Based on the foregoing, staff recommend that Council support the Enbridge application to the Ontario Natural Gas Expansion Program but not to provide any commitment of financial support.

Supporting Documentation

Appendix 1 – Enbridge Gas Inc. Request

Respectfully Submitted:

Rob Armstrong, CAO / Director of Development Services



Enbridge Gas Inc.
603 Kumpf Drive
Waterloo, Ontario
N2J 4A4

February 20, 2020

Mayor Barb Clumpus
Municipality of Meaford
21 Trowbridge Street West
Meaford, ON
N4L 1A1

Dear Mayor Clumpus and Members of Council,

Re: Natural Gas Expansion Program Update

In December 2019, the Government of Ontario announced its plans to further increase access to natural gas by making financial support available for new expansion projects. The Government's Natural Gas Expansion Program offers an opportunity to drive economic development and enhance the quality of life and prosperity of families and businesses across Ontario. As your Regional Director for Enbridge Gas Inc., I'm writing to provide an update on next steps, and how we can work together to bring natural gas to unserved communities in Ontario.

Enbridge Gas will submit project proposals to the Ontario Energy Board (OEB) based on Guidelines that are currently under development. The OEB will review project submissions and provide a report to the Ministry of Energy, Northern Development and Mines later this year recommending potential natural gas expansion projects that the Ontario government could consider as candidates for financial support. The Ministry of Energy, Northern Development and Mines will review the recommendations of the OEB along with other considerations and issue a decision on future natural gas expansion projects eligible to receive financial support.

Based on your interest in the 2017 Natural Gas Grant Program, we know how important access to natural gas is to your municipality. We ask that you confirm your interest to bring natural gas to your municipality by responding to us with your support within 10-15 business days of receiving this letter. The Guidelines to be issued by the OEB are expected to indicate that project submissions will require certain information to be provided to be considered complete – a summary of the expected submission requirements is included with this letter.

For more than 170 years, Enbridge Gas has been delivering the energy that Ontarians need and want. With our long history, anchored in our commitment to operational excellence and strong safety performance, Enbridge Gas is in the best position to bring natural gas to currently unserved areas. We have a number of expansion projects underway, and we are committed to building on this success. If you have any questions, please do not hesitate to contact me or your Municipal Advisor, Brian Lennie at brian.lennie@enbridge.com

Sincerely,

A handwritten signature in black ink, appearing to read 'Murray Costello'.

Murray Costello, P.Eng.
Director, Southeast Region Operations
Enbridge Gas Inc.
519-885-7425
murray.costello@enbridge.com

Nicole Fernandes, P.Eng.
Operations Managers
Enbridge Gas Inc.

Schedule 5C-6
Enbridge Gas Community Expansion Project Proposal

Meaford (_____ SB)

EB-2008-0092

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

Municipality of Meaford

This Certificate of Public Convenience and Necessity replaces those parts of the Certificate of Public Convenience and Necessity F.B.C. 301 relating to the former Town of Meaford, the former Township of St. Vincent and the former Township of Sydenham.

DATED at Toronto, May 26, 2008

ONTARIO ENERGY BOARD

Original Signed By

Neil McKay
Manager - Facilities

Schedule 5D
Enbridge Gas Community Expansion Project Proposal
Mississippi Mills

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

Part I – Name of Proponent	
Name of Proponent: Enbridge Gas Inc.	File No: EB-2019-0255
Project Name: Mississippi Mills 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: patrick.mcmahon@enbridge.com

Part II – Description of Proponent’s Technical Expertise and Financial Capability
<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>

Part II – Description of Proponent’s Technical Expertise and Financial Capability	
2.1	<p>Describe the proponent’s technical expertise to develop, construct, operate and maintain a natural gas distribution system.</p> <p>N/A</p>
2.2	<p>Describe the proponent’s financial capability to develop, construct, operate and maintain a natural gas distribution system, and provide the following:</p> <ul style="list-style-type: none"> • Current credit rating of the proponent, its parent or associated companies. • 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. • 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. <p>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.</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 expand existing gas distribution service within the Township of Mississippi Mills. The proposed facilities will provide access to natural gas to a forecasted 486 customers (456 residential, 28 commercial / institutional and 2 industrial).

The proposed project includes several components:

- Rebuild existing station in the community of Packenham at the intersection of _____ and _____. The proposed supply lateral runs _____ on _____ to _____, _____ on _____ to _____ on _____ and provide gas service _____ of the _____.
- Tie-in to an existing system at the intersection of _____ and _____ to serve the residents along _____ and _____.
- Proposed station at the intersection of _____ and _____, proposed supply lateral to run _____ along _____ to cross the _____ and serve the community of Blakeney.
- Proposed station at intersection of _____ and _____ to provide gas along _____.
- Tie-in to existing system at intersection of _____ and _____ and run _____ along _____ to _____ and from _____ to _____ to proposed station located near the _____ on _____.
- Proposed station at intersection of _____ and _____ with supply pipeline to run _____ along _____ up to _____, _____ along _____, _____ along _____, and _____ along _____.
- Tie-in to existing system on _____ and _____, supply to run _____ along _____ and _____, along _____ up to _____. Distribution offshoots _____ at _____ to _____, _____ on _____, and _____ to _____.

The reinforcement work required includes upsizing the outlet of _____ on _____ and _____ and rebuilding the station.

Reinforcement of inlet piping to _____ and _____ reinforcement of inlet piping to _____ and _____ and _____ on _____ and _____. The _____ requires a full rebuild of the station. Additionally, the _____ requires a full rebuild (large station) located on _____ near _____.

	<p>The approximate length and size of the distribution piping required:</p> <table><tr><td>Pipe Type</td><td>Diameter (NPS)</td><td>Length (m)</td></tr><tr><td>Steel</td><td>4</td><td>217</td></tr><tr><td>Steel</td><td>2</td><td>48</td></tr><tr><td>Polyethylene</td><td>4</td><td>38,915</td></tr><tr><td>Polyethylene</td><td>2</td><td>26,790</td></tr></table> <p>The approximate length and size of the reinforcement required:</p> <table><tr><td>Pipe Type</td><td>Diameter (NPS)</td><td>Length (m)</td></tr><tr><td>Steel</td><td>12</td><td>5,664</td></tr><tr><td>Steel</td><td>4</td><td>19</td></tr><tr><td>Steel</td><td>2</td><td>91</td></tr><tr><td>Polyethylene</td><td>4</td><td>229</td></tr></table> <p>Please refer to Schedule 5D-1 for Project Map.</p>	Pipe Type	Diameter (NPS)	Length (m)	Steel	4	217	Steel	2	48	Polyethylene	4	38,915	Polyethylene	2	26,790	Pipe Type	Diameter (NPS)	Length (m)	Steel	12	5,664	Steel	4	19	Steel	2	91	Polyethylene	4	229
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Steel	2	91																													
Polyethylene	4	229																													
3.2	<p>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.</p> <p>Please refer to Schedule 5D-2, Table 3.2.</p>																														
3.3	<p>Provide the annual and cumulative forecast of volumes (in m³) over the ten-year rate stability period by residential, commercial/institutional and industrial sectors for each community.</p> <p>For the residential segment, the default value for the average consumption level is 2,200 m³ 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.</p> <p>Please refer to Schedule 5D-2, Table 3.3.</p>																														

3.4	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5D-3, Table 3.4.</p>
3.5	<p>Provide the proposed schedule for construction including the start date, all major milestones (with any phases) and the projected in-service date.</p> <p>Please refer to Schedule 5D-4 for Proposed Construction Schedule.</p>
3.6	<p>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.</p> <p>Please refer to Schedule 5D-5.</p>
3.7	<p>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.</p> <p>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.</p> <p>Please refer to Schedule 5D-6 for Enbridge's CPCNs for Town of Mississippi Mills (EB-2012-0408) and the Town of Carleton Place (FBC 132) which cover the entire area of the proposed project.</p>

Part IV – Cost of Project															
4.1	<p>Confirm that the proposed project includes a ten-year rate stability period.</p> <p>The proposed project does include a ten-year rate stability period.</p>														
4.2	<p>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).</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 5D-2, Table 4.2.</p>														
4.3	<p>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.</p> <p>Complete the tables below:</p> <p>Revenue Requirement</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 5D-2, 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															

Part V – Section 36.2 Funding	
5.1	<p>Provide the total amount of section 36.2 funding needed to support the project.</p> <p>\$56,026,869</p> <p>Please refer to Schedule 5D-2, Table 5.1.</p>
5.2	<p>Provide the section 36.2 funding amount per customer number served in year ten of the project.</p> <p>\$115,282</p> <p>Please refer to Schedule 5D-2, Table 5.2.</p>
5.3	<p>Provide the section 36.2 funding amount per volume (m³) in year ten of the project.</p> <p>\$39.23</p> <p>Please refer to Schedule 5D-2, Table 5.3.</p>

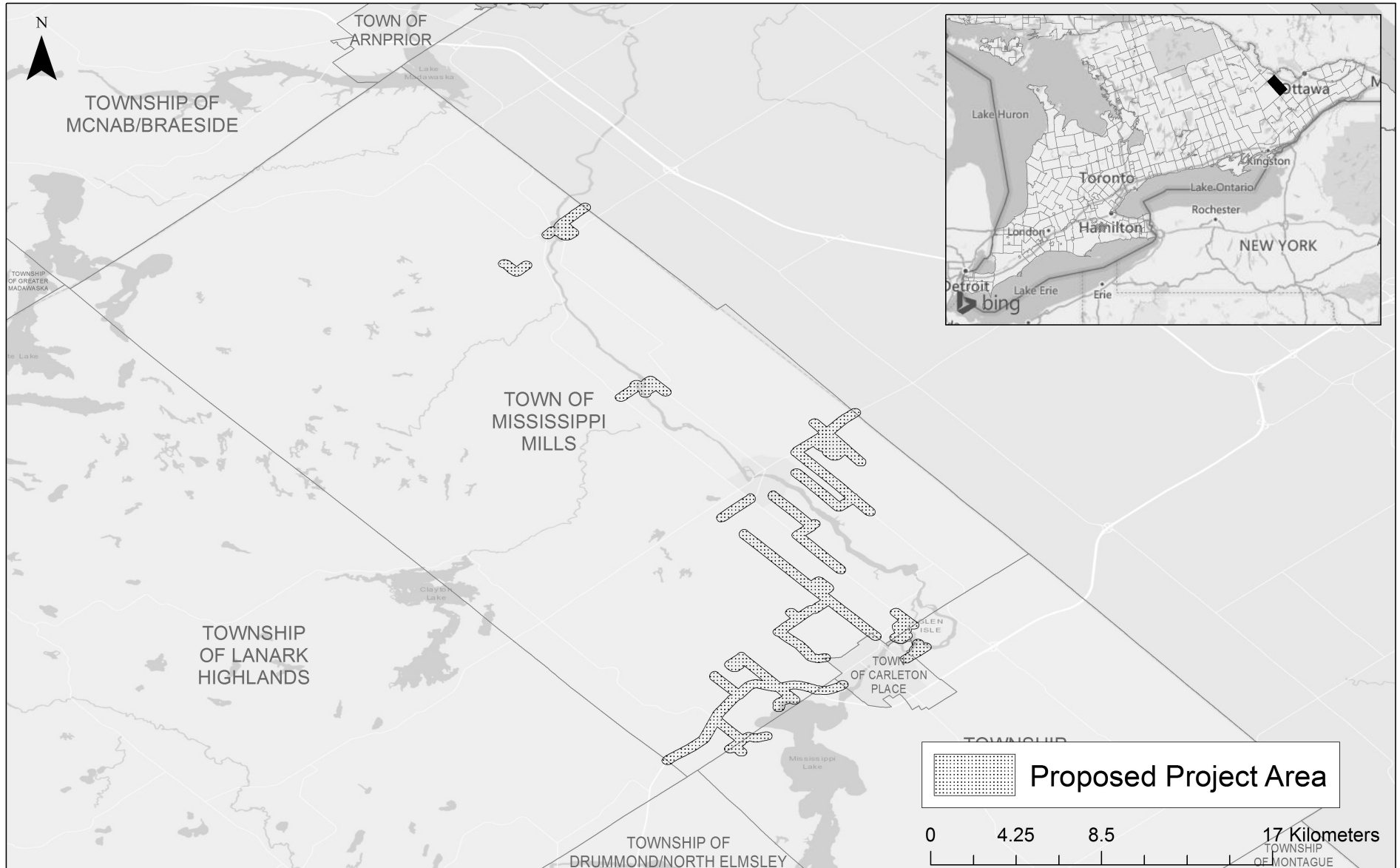
Part VI – Distribution Charge	
6.1	<p>Provide the estimated amount that the proponent proposes to recover from residential customers on an annual basis (inclusive of any system expansion surcharge) in the form of an estimated annual distribution charge inclusive of fixed and variable charges over the rate stability period.</p> <p>Provide a confirmation that there would be no material cross-subsidization between rate classes.</p> <p>Please refer to Schedule 5D-2, Table 6.1.</p> <p>Enbridge Gas confirms that there will be no material cross-subsidization between rate classes.</p>

Part VII – Profitability Index / Benefit to Cost Ratio	
7.1	<p>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.</p> <p>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).</p> <p>Please refer to Schedule 5D-2, Table 7.1.</p>
7.2	<p>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.</p> <p>Please refer to Schedule 5D-2, Table 7.2.</p>

Part VIII – OEB Approvals	
8.1	<p>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).</p> <ul style="list-style-type: none"> • Leave to Construct
8.2	<p>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 website and where applicable assume a written hearing process.</p> <p>Please refer to Schedule 5D-4.</p>

Schedule 5D-1
Enbridge Gas Community Expansion Project Proposal
Mississippi Mills

Mississippi Mills



Schedule 5D-2
Enbridge Gas Community Expansion Project Proposal
Mississippi Mills

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		123	110	41	30	23	28	25	28	25	23	456
Commercial	Firm		-	12	4	3	3	1	-	-	-	-	23
Institutional	Firm		-	-	-	-	-	-	-	-	-	-	-
Agricultural	Firm		-	2	1	1	1	-	-	-	-	-	5
Industrial	Firm		-	1	1	-	-	-	-	-	-	-	2
Total Customers			<u>123</u>	<u>125</u>	<u>47</u>	<u>34</u>	<u>27</u>	<u>29</u>	<u>25</u>	<u>28</u>	<u>25</u>	<u>23</u>	<u>486</u>
Cumulative Customers			123	248	295	329	356	385	410	438	463	486	

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

<u>Customer Type</u>	<u>Project Year</u>	<u>Annual Volumes - m3</u>										<u>Total</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		147,600	427,200	608,400	693,600	757,200	818,400	882,000	945,600	1,009,200	1,066,800	7,356,000
Commercial		-	27,200	64,300	82,900	100,300	110,200	111,400	111,400	111,400	111,400	830,500
Institutional		-	-	-	-	-	-	-	-	-	-	-
Agricultural		-	10,000	25,000	35,000	45,000	50,000	50,000	50,000	50,000	50,000	365,000
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>147,600</u>	<u>514,400</u>	<u>847,700</u>	<u>1,011,500</u>	<u>1,102,500</u>	<u>1,178,600</u>	<u>1,243,400</u>	<u>1,307,000</u>	<u>1,370,600</u>	<u>1,428,200</u>	<u>10,151,500</u>

<u>Customer Type</u>	<u>Project Year</u>	<u>Cumulative Volumes - m3</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		147,600	574,800	1,183,200	1,876,800	2,634,000	3,452,400	4,334,400	5,280,000	6,289,200	7,356,000	
Commercial		-	27,200	91,500	174,400	274,700	384,900	496,300	607,700	719,100	830,500	
Institutional		-	-	-	-	-	-	-	-	-	-	
Agricultural		-	10,000	35,000	70,000	115,000	165,000	215,000	265,000	315,000	365,000	
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>147,600</u>	<u>662,000</u>	<u>1,509,700</u>	<u>2,521,200</u>	<u>3,623,700</u>	<u>4,802,300</u>	<u>6,045,700</u>	<u>7,352,700</u>	<u>8,723,300</u>	<u>10,151,500</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	\$ 56,026,869
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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 10 115,282</u>
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Table 5.3 - Section 36.2 Funding Amount Per Volume (m3)

Section 36.2 Funding Amount Per Volume (m3)	<u>\$ Year 10 39.23</u>
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Table 6.1 - Distribution Charge

	Project Year	1	2	3	4	5	6	7	8	9	10	Total
Distribution Revenue	\$	25,864	86,074	134,772	158,109	174,604	188,529	200,199	211,344	222,488	232,581	\$ 1,634,563
SES Revenue		33,948	118,312	194,971	232,645	253,575	271,078	285,982	300,610	315,238	328,486	2,334,845
Total Distribution Charge	<u>\$</u>	<u>59,812</u>	<u>204,386</u>	<u>329,743</u>	<u>390,754</u>	<u>428,179</u>	<u>459,607</u>	<u>486,181</u>	<u>511,954</u>	<u>537,726</u>	<u>561,067</u>	<u>\$ 3,969,408</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 5D-3
Enbridge Gas Community Expansion Project Proposal
Mississippi Mills

Section 3.4 Mississippi Mills

Total Forecasted Customers 486 Penetration Rate 65%

Existing Fuel / Heating Type	Number of Customers	Current proportion of customer ¹	Estimated Conversion Cost ²	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	102	21%	\$ 5,000	\$ 3,050	\$ 1,481	\$ 1,570	\$ 160,208	7.2	-2.7	732	(273)
Electricity F/A	44	9%	\$ 5,000	\$ 2,187	\$ 1,481	\$ 706	\$ 30,900	0.6	3.9	26	171
Electricity Baseboard	58	12%	\$ 12,000	\$ 2,187	\$ 1,481	\$ 706	\$ 41,200	0.6	3.9	34	228
Propane	214	44%	\$ 600	\$ 1,764	\$ 1,481	\$ 283	\$ 60,587	5.6	-1.1	1,195	(233)
Wood	44	9%	\$ 3,500	N/A	N/A	\$ -	N/A	NA	NA	NA	NA
Other	24	5%	\$ 5,000	N/A	N/A	\$ -	N/A				
Total	486	100%	\$ 31,100	\$ 9,188	\$ 5,923	\$ 3,266	\$ 292,895	13.9	4.1	1,987	(106)

¹ Fuel shares were estimated based on the average fuel share distribution observed in other potential expansion areas. Specifically, 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.

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 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 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 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 5D-4
Enbridge Gas Community Expansion Project Proposal
Mississippi Mills

Mississippi Mills Community Expansion Project Pipeline Construction Schedule

[illegible]

Schedule 5D-5
Enbridge Gas Community Expansion Project Proposal
Mississippi Mills



CORPORATION OF THE MUNICIPALITY OF MISSISSIPPI MILLS

3131 OLD PERTH ROAD • PO BOX 400 • RR 2 • ALMONTE ON • K0A 1A0

PHONE: 613-256-2064
FAX: 613-256-4887
WEBSITE: www.mississippimills.ca

May 11, 2020

Via E-mail

Dear Ian Ross,
Director of Eastern Region Operations for Enbridge Gas

Re: Expression of Support for Natural Gas Expansion to Municipality of Mississippi Mills

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 Mississippi Mills, I would like to formally express our interest to have Mississippi Mills Gas Extension 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,

Christa Lowry
Mayor of Mississippi Mills

Schedule 5D-6
Enbridge Gas Community Expansion Project Proposal
Mississippi Mills

EB-2012-0408

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 in the geographic boundaries of the

Town of Mississippi Mills

This certificate replaces certificates associated with the Town of Almonte (F.B.C. 148), the Township of Pakenham (F.B.C. 177) and the Township of Ramsay (F.B.C. 176).

DATED at Toronto, December 13, 2012

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

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

EB-2019-0255
Schedule 5D-6(b)

AND IN THE MATTER OF an application
by The Consumers' Gas Company of
Toronto for a Certificate of Public
Convenience and Necessity to construct
works and to supply natural gas to the
Town of Carleton Place in the County of
Lanark

B E F O R E:

A. R. Crozier, Chairman } Tuesday, the 12th day
W. R. Howard, Commissioner } of November, 1957.

CERTIFICATE OF PUBLIC CONVENIENCE
AND NECESSITY

UPON THE APPLICATION of The Consumers' Gas Company of
Toronto (hereinafter called 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 at the City of Toronto on the
12th day of November, 1957 after due notice had been given as
directed by the Board in the presence of Counsel for the Applicant
no one else appearing the Board being pleased to adjourn the said
application until November 22nd, 1957 and the same coming on
that day 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 of Toronto for the supply of natural
gas to the inhabitants of the Town of Carleton Place and for the
construction of the works necessary therefor,
2. The Board fixes the costs of this Application at \$10.00
payable forthwith by the Applicant.

DATED at Toronto this 9th day of December 1957.

ONTARIO FUEL BOARD

.....
Chairman

.....
Commissioner