EB-2018-0305

ONTARIO ENERGY BOARD

IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c.15 (Sched.B);

AND IN THE MATTER OF an Application by Enbridge Gas Distribution Inc. and Union Gas Limited (to amalgamate into Enbridge Gas Inc. effective January 1, 2019), pursuant to section 36(1) of the *Ontario Energy Board Act, 1998*, for an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas as of January 1,2019.

Energy Probe Research Foundation

Interrogatories to Enbridge Gas Inc.

April 4, 2019

A-EP-1
Reference: Exhibit A1, List of Evidence

a) Please confirm the Application conforms fully to the OEB's EB-2017-0307 MAADs Decision and Rate Order.

b) If not, please list all items with evidentiary references, that deviate from the Decision and Rate Order.

c) Please provide a summary of the basis of any of the listed deviations

A-EP-2
Reference: Exhibit A1

Please provide the most recent EGI organization chart down to the Director level.

A-EP-3
Reference: Exhibit A1, Tab 5, Schedule 2, Conditions of Service Section 6.4.1:
Exhibit A1, Tab 5, Schedule 4,
Preamble:
"Federal Carbon Charge
Pursuant to the Greenhouse Gas Pollution Pricing Act (GGPPA), gas distributors are required to pay to the federal government a fixed carbon charge for use and deliveries of natural gas to customers. This charge is billed based on the amount of natural gas consumed by customers other than industrial emitters who are registered under the GGPPA Output-Based Pricing System (OBPS). For any fixed carbon and OBPS charges that Enbridge must pay to the federal government for its transmission and storage facilities, these charges are included in the "Delivery to You" item on the bill."

a) Please confirm (with reference) the Decision/Directive to include the Federal Carbon Charge in the "*Delivery to You"* item of the Customer Bill.

b) Clarify if/how this Directive differs to the presentation of the prior Cap and Trade GHG item.

c) Please provide an estimate of the amounts of the charge (monthly/yearly) for Residential Customers in EGD and Union Rate Zones and compare to the 2017/2018 Cap and Trade charge.

B-EP-4
Reference: Exhibit B1, Tab 1, Schedule 1, Pages 3 and 5, Tables 2 and 3

Please provide a copy of the Statistics Canada Table 36-10-0106-01 (formerly Can Sim 380-066) GDPPI quarterly for 2017 and 2018

a) Please provide the calculations resulting in the values in Table 3.

b) Please provide the equivalent calculations for 2018.

c) Please provide a version of Table 2 using the 2018 Inflation Factor.

B-EP-5
Reference: Exhibit B1, Tab 1, Schedule 1, Page 12- AUTVA (Enbridge) and NAC (Union);

EGD Rate Zones
Exhibit F1, Tab 1, Rate Order, Working Papers, Schedule 10

a) Please show Graphically, for Rate 1 and Rate 6, the average use for the last 10 years and for the forecast period. Please provide a comment on the accuracy of the model and trends.

b) Please provide a status report on the review of Average Use models for EGD as agreed in the EB-2017-102, Settlement at Exhibit N1, Tab 1, Schedule 1, page 8

Union Rate Zones
Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 13.

c) Please show Graphically for Rate M1 and M2, the average use for the last 10 years and for the forecast period. Please provide a Comment on the accuracy of the model and trends.

d) Please provide a status report on the review of Average Use models for Union as in the EB-2016-0118 Settlement paragraph 12.

B-EP-6
Reference: Exhibit B1, Tab 1, Schedule 1, Page 14, Table 4, Appendices A&B

a) Please provide a redline comparison of the existing EGDI and Union ESM DAs and new EGDI ESMDA.

b) Please explain in detail the changes to the dead band threshold and sharing for each Rate Zone.

c) Please provide examples of the ESM calculations for 2019 using 0 -300 bps excess earnings

B-EP-7

Reference: Exhibit B1, Tab 1, Schedule 1, Page 26; Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 16, pp. 4-5.

Preamble: "*Enbridge Gas proposes a one-time adjustment of ($10.4) million associated with the capital pass through projects ("Projects") that were included in rates as a Y factor during Union's 2014-2018 IRM term. The proposed adjustment represents the difference between the 2018 Project revenue requirement of $127.6 million included in Union's Board-approved 2018 rates and the 2019 forecast Project revenue requirement of $117.2 million."*

a) Please confirm that the costs of the projects and adjustments are subject to prudence review.

b) When will this review occur?

B-EP-8

Reference: Exhibit B1, Tab 1, Schedule 1, Page 29

Preamble: "*Enbridge Gas has added 30,393 GJ/d of project demands to the allocation of the 2019 project costs and to the derivation of the 2019 Rate M12/C1 Dawn-Parkway demand rate as part of this application. As the revenue of the surplus capacity will be built into 2019 rates, there is no longer a requirement to track the revenue associated with the surplus capacity in the project deferral account."*

a) Please provide a schedule with the term(s) and prices realized for the surplus capacity (names other than EGI affiliates omitted).

b) Please provide a Comparison of the annual revenue and average unit costs to the M12/C1 rates.

c) Please provide references for data/calculations.

B-EP-9

Reference: Exhibit B1, Tab 1, Schedule 1, Page 30, Table 11 and Appendix E

Preamble: *"Enbridge Gas proposes to adjust the customer-related cost variance for the Union rate zones in proportion to the current approved revenue, assuming the monthly customer charge revenue is recovered in the first delivery block of the volumetric delivery charges."*

a) Please provide clarity on the pathway and endpoint for M1 and M2 customer charges over the 5-year period.

b) Please explain how is it appropriate in the context of rate design principles, that by adjusting the first delivery rate block to include the monthly customer charge revenue, the bill impacts are more consistent for each customer within the rate class regardless of annual volumes consumed.

c) Are there similar rate design/customer charge changes contemplated for EGDI Rate zones?

B-EP-10
Reference: Exhibit B1, Tab 1, Schedule 1, Page 33 and pages 41-46 Appendix I; Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 11.
Preamble: "*The MAADs Decision requires Enbridge Gas to track actual costs and amounts recovered through rates related to the PDO during the deferred rebasing period for review at the time of rebasing.*
Enbridge Gas proposes to update the allocation of the PDO and PDCI demand-related costs based on the 2019 Dawn-Parkway design day demands and the allocation of the in-franchise compressor fuel costs based on 2019 forecast volumes."

a) Please provide a schedule that summarizes the total allocation of 2019 PDO and PDCI costs and bill impacts for each of the four EGI rate zones, as provided in the evidence at pages 43/44. Provide explanatory notes.

b) When/how will EGI/Union report on the PDCI volumes and balances?

c) If there are differences between the forecast in rates and actuals, how will these be addressed?

d) Given the utility restructuring and that: *"As of November 1, 2017 the initial Parkway shortfall has been fully eliminated as a result of Dawn to Kirkwall turnback, and therefore Union did not need to take action to manage the shortfall"*.
Why should the PDO continue for the next 5 years? Please discuss.

B-EP-11
Reference: Exhibit B1, Tab 1, Schedule 1, Page 40 and Appendix H

a) Is the Feasibility Study filed for Board Approval or information?

b) What changes are there to the Connection Policy Guidelines? Please list any major amendments.

c) Are the Policy/Guidelines applicable to all EGI rate zones?

d) What conclusions should existing ratepayers reach from the feasibility analysis regarding cost consequences of infill projects and Community Expansion projects? Please discuss.

B-EP-12
Reference: Exhibit B1, Tab 2, Schedule 1, Page 9 and Table 4
Preamble: "*The Board's ICM materiality threshold calculation results in a 2019 threshold value of $468.513 million for the EGD rate zone and $375.2 million for the combined Union rate zones. The materiality threshold establishes the minimum capital expenditures a utility must fund through base rates. The maximum incremental capital investment eligible for ICM funding is the amount of capital expenditures in the year in excess of the threshold value."*

a) Please confirm that per Table 4 the ICM calculation assumes a rate increase for the PCI for 2019 for EGD of 1.07% and Union of 0.72%.

b) Why is EGI proposing a PCI arithmetic average based in the 5-year deferred rebasing period, as opposed to a forecast of expenditures and base rates over the period? Please explain and discuss the options considered.

c) Please explain why a combined consolidated EGI ICM threshold is not more appropriate.

B-EP-13
Reference: Exhibit B1, Tab 2, Schedule 1, Pages 12 and 13
Preamble: *"To determine the 2017 revenue from general service rate classes, Enbridge Gas used the actual customer count and held the normalized average consumption/average use ("NAC/AU") per customer constant with the NAC/AU in base rates. If the NAC/AU is not held constant, then any change in NAC/AU would have to be offset by a proportionally similar rate adjustment to keep the revenue per customer constant. Both the EGD and Union rate zones have deferral accounts that record the revenue impact associated with the difference between the forecast normalized average use per customer embedded in rates and the actual normalized average use experienced during the year."*

a) Please confirm that the approved methodology for average use adjustments to rates includes 3-year averaging.

b) Please explain why average use per customer should be held constant for ICM growth, rather than using a rolling 3-year average.

c) Please provide a revised calculation of the growth factor using an average 3-year rolling average of average use. Compare to Table 5 using the constant/holding average use approach.

B-EP-14

Reference: Exhibit B1, Tab 2, Schedule 1, Page 18, Table 8, and Exhibit. B1, Tab 2, Schedule 1, Page 24, Table 8
Preamble: The Schedules show the Total Incremental ICM by rate zone for each of the ICM funded requested projects.

Does EGI propose to update the data and will there be a process for discovery regarding material changes in cost and timing?

B-EP-15
Reference: Exhibit B1, Tab 2, Schedule 1, Page 31, Table 11

a) Please confirm that over the 5 years the net ICM annual revenue requirement (costs and revenue) will vary, based on several factors including timing and the dates of in-service additions (ISAs).

b) Does EGI agree that an ISA RR deferral account for ICM projects, is appropriate to protect ratepayers. If not, please explain why not and/or provide alternatives to an ICM RRVA

B-EP-16
Reference: Exhibit B1, Tab 2, Schedule 1, Pages 19 to 27

a) For each of the proposed ICM projects, please provide the detailed itemized cost estimate including contingency with line by line explanations of differences from the costs approved by the OEB in the LTC proceeding. For each project please provide the current Profitability Index ("PI") and compare it to the PI approved by the OEB in the LTC proceeding. Also please indicate if there have been any changes in the route or schedule of any project from the route and schedule approved by the OEB in the LTC proceeding.

b) For each proposed ICM project where there is a significant difference between the cost, PI and route approved by the OEB in the LTC proceeding and the current cost, PI, and route please explain the meaning of the approvals in the LTC proceeding. For example, should not project cost above what was approved in the LTC proceeding be subject to a prudence review?

c) Please recalculate each ICM proposal using project cost approved by the OEB in the LTC proceeding.

B-EP-17
Reference: Exhibit B1, Tab 2, Schedule 1, Page 32

Based on the response to EP-16 regarding updated ICM project costs and timing, please update the 2019 ICM Net Revenue Requirement in Table 11 and the Allocation to Rate classes for 2019.

C-EP-18
Reference: Exhibit C1, Tab 1, Page 6 and C1, Tab2, Page 41
Preamble: "Examples of this include support for programs such as Renewable Natural Gas, Compressed Natural Gas, and the integration of gas and electric infrastructures using technology like combined heat and power, geothermal loops and hydrogen storage and blending."

Please confirm that the programs listed except for hydrogen blending are non-utility programs.

C-EP-19
Reference: Exhibit C1, Tab 1, Pages 8 to 10

Were any financial constraints, such as earnings per share or customer rate impacts such as maximum rate increases, used as constraints in the preparation of the USP? If there were, please list them. If not, please explain why not.

C-EP-20
Reference: Exhibit C1, Tab 1, Page 22
Preamble: *"The budgets are reviewed at successively higher levels of management, with modifications made on an iterative basis as required. A final budget for each area is endorsed by the accountable Vice President responsible for each area."*

Please provide a table listing each level of management that reviews the budget and the types of modifications that each level of management makes.

C-EP-21
Reference: Exhibit C1, Tab 1, Pages 23 and 27
Preamble: *"The consolidated O&M budget is then consolidated by Finance with the broader Company budget and is reviewed and approved by the Company's Senior Executive management team."*

"The consolidated budget and LRP is then reviewed and approved by the Company's senior executive management team."

a) Does the Company's Senior Executive management team in the text refers to Enbridge Inc. management or to Enbridge Gas Inc. management team?

b) Please file a copy of the consolidated 2019 budget that was presented by Finance to the Company's Senior Executive Team

C-EP-22

Reference: Exhibit C1, Tab 1, Page 23
Preamble: *The Company's capital budget process ensures that capital is allocated in a way that maximizes the value of life cycle-based capital while mitigating risk to the lowest practical level."*

What is *"life cycle-based capital"* and how is its value maximized?

C-EP-23
Reference: Exhibit C1, Tab 1, Pages 24, 27 and 34

a) What is LRP and how does it relate to the USP?

b) If the LRP and the USP are related please file the LRP.

C-EP-24
Reference: Exhibit C1, Tab 1, Page 28 and Exhibit C1, Tab 2, Page 89

a) What is the significance of Lifetime Risk Return on Investment?

b) Please provide a numerical example of the calculation using NPS 30 Don River Replacement Project numbers.

C-EP-25
Reference: Exhibit C1, Tab 1, Schedule 1, Page 57, Figures 12&13

a) Please clarify if the PI shown in the Figures is based on gross cost or net cost (less CIAC).

b) For Figures 12 and 13 please provide the "Best Fit" Lines and provide the equations.

c) Please explain and discuss the trends in PI for the Project and Rolling Portfolios for Union and EGD.

d) Please provide the historic 2015+ and current approved system expansion projects for EGD and Union with summary data such as location, cost, customer additions etc.

e) Please discuss the outlook for system expansion projects for each rate Zone. Delineate projects using SES and Government support.

f) How much will be invested in SE during the Deferred rebasing period 2020-2025? Please reconcile to the data in the Utility System Plan.

C-EP-26
Reference: Exhibit C1, Tab 2, Pages 41and 42
Preamble: *"The overall portfolio has an LRROI of 119%. The breakdown by asset class has been summarized in Table 1.9-1. While different asset classes have higher or lower LRROI values, the value of the lifetime risk reduced is greater than the capital investment."*

a) Please explain the significance of LRROI of 119% for the overall prtfolio. What should the OEB conclude from that number?

b) In Table 1.9-1 Storage has the highest LRROI of 284%. Does that mean that Storage is the most profitable asset class? Please show how the 284% number was calculated.

c) In Table 1.9-1 Pipe has the lowest LRROI of 41%. Does that mean that Pipe is the least profitable asset class? Please explain how the 41% number was calculated.

C-EP-27
Reference: Exhibit C1, Tab 2, Page 44, Table 19-3

Please explain how the Total Overhead numbers were determined.

C-EP-28
Reference: Exhibit C1, Tab 2, Schedule 1, Page 45, Table 1.9-5: ICM-Eligible Capital Projects

a) Please explain the relationship between the information in this table and the ICM project information in Exhibit B1, Tab 2.

b) Please provide a consolidated schedule showing approved and forecast ICM projects over the 5-year deferred rebasing period with summary data on costs and in-service dates.

C-EP-29
Reference: Exhibit C1, Tab 2, Page 45, Table 19-5

The information in the table indicates that the driver for the NPS 20 Don River Relocation project is "third party relocation". Does Enbridge have a cost sharing agreement with the "third party". If the answer is yes, what is the sharing ratio? If the answer is no, please explain why not.

C-EP-30
Reference: Exhibit C1, Tab 2, Page 58, Figure 3.3-1

Should the OEB be concerned that 9.1 Monitoring Measurement Risk and Evaluation and 9.2 Internal Audit have been rated as low maturity by KPMG?

D-EP-31
Reference: Exhibit D1, Tab 1, Schedule 1, Page 22

Preamble: The Question to Residential customers regarding higher rates for infrastructure replacement was:
"*In considering its five-year investment plan Enbridge Gas Distribution estimates that it will need to increase investments to keep up with aging infrastructure and still maintain the current level of reliability and safety it delivers to its customers. It is estimated that the average residential customer bill will need to increase by 3% or $2 per month over the next 5 years to maintain current levels of safety and reliability. This increase would start in 2019 and apply until 2023. So, by the end of 2023 residential customers will pay $10 more per month compared to what they pay now, to cover these increased capital investments."*

a) Please confirm this question relates to Sustainment Capital Investment under the CIR Plan 2020-2025.

b) What information was provided to the respondents as context for the question? Please be specific.

c) Why does the CIR Plan not provide sufficient capital for sustainment? Please reply in detail.

d) Please provide the proposed budgets that underpin this question.

e) Please provide the current level of reliability and the level in 2025 based on measurable parameters.

f) Will there be offsetting OM&A cost reductions from the investment? Please delineate.

D-EP-32
Reference: Exhibit D1, Tab 1, Schedule 1, Page 24
Preamble: The following question was put to Residential Customers:
"*As you may know, on January 1, 2017 the Ontario government is planning to introduce a Cap and Trade system to help reduce greenhouse gas emissions in Ontario. Customers will pay a cost related to the amount of greenhouse gases they emit, such as from the use of fossil fuels.*

The government plans to invest these cap and trade proceeds into various initiatives that reduce greenhouse gases such as renewable sources of energy, public transportation, electric vehicle incentives, and energy conservation programs. Initially, the government expects costs to be about $7 per month for each natural gas customer for home heating, but the exact amounts next year and in future years is not yet known. Some estimates have indicated that the cost could increase by roughly 50 percent by 2023."

a) Were Residential Customers aware that the Cap and Trade charge was added to their bills? Please provide data on the level of awareness.

b) Has EGI canvassed its customers following the cancellation of the Cap and Trade and introduction of the Federal Carbon Tax in April 2019? If so please provide the results.

D-EP-33
Reference: Exhibit D1, Tab 1, Schedule 1, Pages 25 and 26
"There are a couple of ways in which Enbridge Gas can help to lower customer costs to offset this cap and trade cost. One way is to offer conservation programs (such rebates and incentives) to encourage customers to make changes to their home to reduce their household natural gas consumption. Another way is for Enbridge to invest in renewable energy sources that will reduce greenhouse gas emissions across the network and offset the amount of cap and trade costs to customers overall.

SOME PEOPLE SAY there is not much more they can do to make their home more energy efficient and therefore they may not be able to lower the cap and trade cost they pay. They are more likely to see savings based on investments Enbridge Gas could make in renewable energy that will reduce the cap and trade costs to customers across the network.

OTHER PEOPLE SAY there is more they can do to make their home more energy efficient and they would prefer to have access to rebates and incentives to help them do that to lower the cap and trade cost they pay rather than rely on investments in renewable energy by Enbridge Gas to lower cap and trade cost across the network."

a) Which of the above questions was put to residential customers?

b) What information was provided to the respondents as context for the question? Be specific such as relative costs and bill impacts.

c) Given the OEB decision on RNG is the question no longer accurate? Please discuss.

D-EP-34
Reference: Exhibit D1, Tab 1, Schedule 1, Page 29
Preamble: The following question was put to Residential Customers:
"As you may know, Renewable natural gas (RNG), or bio methane gas or biogas, is a type of renewable gas that is carbon neutral, thus it is better for the environment than conventional natural gas. It is a sustainable fuel that is created by converting organic material such as

municipal green bin collection waste (ie. vegetable peelings), farm crop residue, gas from water treatment plants and even landfill gas that is captured and cleaned to the same quality level as natural gas. Renewable natural gas could be produced in Ontario and put into the existing natural gas distribution system. It would be compatible with all your natural gas appliances so there would be no lifestyle change for households. Renewable natural gas helps reduce greenhouse gas emissions by displacing conventional natural gas. Investing in renewable natural gas can start with modest levels of blending renewable energy with conventional energy. Think of this like the 2% blending of ethanol in gasoline. This level of renewable blending is estimated to cost customers approximately $1.60 per month. Over time, it is expected the cost of renewable natural gas will decline, making renewable natural gas less expensive than conventional natural gas in the long-term for customers."

a) Please provide the basis of the Calculation of the $1.60 per month.

b) Is this question accurate, given the OEB decision on RNG? Please discuss.

c) Is it still relevant given the Government Policy on RNG? Please discuss.

D-EP-35
Reference: Exhibit D1, Tab 1, Schedule 1, Page 31
Preamble:
"In each of the customer groups, willingness to pay even more for the additional blending of renewable natural gas into the existing natural gas network is low. In terms of residential customers, only about one third (36%) would be willing to pay more (above the base increase detailed in the previous question)."

a) Was this result available at the time of the RNG proceeding?

b) If so please provide the reference.

c) Why is EGI bringing this survey regarding RNG into this proceeding? Please be specific regarding the objective(s) for doing so.

D-EP-36
Reference: Exhibit D1, Tab 1, Schedule 1, Page 42
Preamble:
"Among Residential customers, more than half (58%) are willing to pay an increase in their bill to fund an investment. About one third (35%) of Residential customers would be willing to pay approximately $3.60 more per month for both maintaining current levels of safety and reliability and to invest in renewable natural gas. Slightly more than one in ten (14%) Residential customers would be willing to pay approximately $1.60 more per month to invest in renewable natural gas exclusively, while one in ten (9%) would be willing to pay approximately $2.00 more per month to maintain existing levels of safety and reliability."

a) Please confirm the cited monthly bill impact of $3.60 is split between replacement infrastructure ($2.00) and RNG ($1.60).

b) What is the current comparable Bill impact for DSM/Conservation?

c) Is EGI suggesting to the Board it should charge customers for all three initiatives plus the federal Carbon Tax during the RNG Plan? If provide the monthly residential bill impact.

d) If not, please clarify exactly what EGI is proposing and the estimated bill impacts

D-EP-37
Reference: Exhibit D1, Tab 2, Schedule 1, Page 54
Preamble:

- *The three most important outcomes for (Union) residential participants are "pricing" (88% top 3 issue), "safety" (67% top 3 issue) and "reliability" (65% top 3 issue). For business participants it was the exact same order ("pricing", 85% top 3 issue; "safety", 62% top 3 issue; "reliability", 60% top 3 issue).*
- *Roughly three-in-four (74%) residential and two-thirds (65%) of business participants find the price of distributing gas "reasonable". Those residential participants with large bills are less likely to find it reasonable ($120+: 65% vs. $0-79: 79% reasonable).*
- *Nearly all participants are satisfied with Union Gas' performance on safety (residential: 92%; business: 91%) and reliability (residential: 98%; business: 93%).*

a) Were the respondents asked about paying more for infrastructure replacement, Conservation/DSM and RNG? If not why was this not done? If so please provide the results.

b) Were the Respondents asked about paying the Federal Carbon Tax? If so please provide the result and compare with the comment on Page 65.
"Unpacking "lower cost", most of the codes are general but specific mentions include the delivery charge, showing the carbon tax, and senior discount".