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December 8, 2023

VIA RESS AND EMAIL

Nancy Marconi
Registrar
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Nancy Marconi:

**Re: Enbridge Gas Inc. (Enbridge Gas)
Ontario Energy Board (OEB) File No.: EB-2023-0196
2024 Federal Carbon Pricing Program Application
Interrogatory Responses**

In accordance with the OEB's Procedural Order No 1 issued on November 10, 2023, enclosed please find the interrogatory responses of Enbridge Gas.

If you have any questions, please contact the undersigned.

Sincerely,

Lesley Austin
Specialist Regulatory Applications

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Energy Board Staff (STAFF)

Interrogatory

Reference:

Ref 1: Exhibit A, Tab 2, Schedule 1, pages 13-15

Ref 2: EB-2022-0194, Exhibit I.STAFF.3(d)

Preamble:

Enbridge Gas provided a summary of its Facility-Related Emissions Reduction opportunities, indicating only two active initiatives, consistent with those identified in its 2023 FCPP application. Enbridge Gas notes that, as part of its GHG emissions reduction strategy, identified opportunities will be reviewed on an annual basis, including revisiting any previous assumptions, project costs and the cost of carbon. This is largely consistent with Enbridge Gas' response to OEB staff interrogatories as part of the 2023 FCPP application, which also noted that opportunities that meet the criteria will be reviewed for implementation at the executive level and annual strategy updates will begin in January 2023

Question(s):

- a) Please discuss what new opportunities were presented for consideration, if any, as part of the update process that began in January 2023.
- b) Please discuss any new developments related to carbon capture and storage processes and technologies and if any options have been considered related to Enbridge Gas's facility-related emissions.
- c) Please elaborate on the internal process Enbridge Gas undertakes to identify new opportunities and assess previous initiatives, including the various groups across the company included in these assessments.
- d) Please indicate how and when Enbridge Gas plans to bring proposals forward to the OEB for approval (e.g., will this be part of future FCPP applications, rates proceedings, leave to construct, updates to the Asset Management Plan, etc.).

Response:

- a) The following new opportunities related to stationary combustion and flaring emissions have been identified for consideration (Enbridge Gas's facility-related emissions covered under the GGPPA and EPS only include stationary combustion and flaring emissions). Opportunities to reduce GHG emissions from fugitive and vented sources were addressed in Enbridge Gas's 2024 Rebasing Application.¹

New Opportunity	Description
Online Monitoring - 2nd Phase	Investigating a second phase of the online monitoring project to bring online older model compressor units in order to optimize engine use.
Gas Heat Pumps for Energy Efficiency at Gate Stations	Investigate the replacement of boilers with highly efficient gas heat pumps to reduce emissions at gate stations.

- b) Enbridge Gas has been working with industry and the provincial government to advance the regulatory framework for Carbon Capture, Utilization and Storage (CCUS) in Ontario. In late 2022, Ontario Regulation 390/18, Greenhouse Gas Emissions: Quantification, Reporting and Verification was amended to include a provision that CO₂ "that has been permanently stored in long-term geological storage" could be subtracted from the reportable emissions.² However, it wasn't until March 23, 2023, that the ban on sequestering carbon was removed from the Oil, Gas and Salt Resources Act (OGSRA).³ In June of 2023, the OGSRA was again amended to include provisions for "special projects" that could include CCUS. These provisions have yet to come into force. Corresponding regulations have been proposed and are currently being reviewed by the Ministry of Natural Resources and Forestry.⁴ Enbridge Gas has been active and will continue to be engaged in the consultation and engagement process to advance CCUS as a potential GHG mitigation tool for Ontario.

Enbridge Gas has reviewed the potential for CCUS on our natural gas fired compressors at Dawn. However, as the compressor units on the Enbridge Gas system are intermittent use compressors with a relatively low load factor this opportunity is not currently economically feasible.

Additionally, Enbridge Gas has explored the possibility of utilizing captured CO₂ to reduce facility-related emissions. A CleanO2 CarbinX pilot project is currently underway to capture emissions from one of Enbridge Gas's building heating boilers

¹ EB-2022-0200, 2024 Rebasing Application, March 8, 2023, Exhibit 1, Tab 10, Schedule 8, Table 1 & Table 2.

² <https://www.ontario.ca/laws/regulation/180390>

³ <https://www.ontario.ca/laws/statute/90p12>

⁴ <https://ero.ontario.ca/notice/019-7507>

as a possible opportunity to reduce emissions.⁵ The project provides experience and data with capture and use equipment to quantify efficiency and effectiveness. If successful, this technology has the possibility of being replicated at other facilities to reduce emissions from building space and water heating. Although this project has the potential to reduce facility-related emissions, the Greenhouse Gas Pollution Pricing Act (GGPPA) does not include a mechanism to exempt natural gas with CCUS from the application of the Federal Carbon Charge, and therefore Enbridge Gas's Company Use Volumes are subject to the Federal Carbon Charge regardless of the implementation of this CCUS technology.

In addition to the CleanO2 CarbinX unit, Enbridge Gas's Technology Development team regularly reviews developing carbon capture technology and manufacturers to evaluate application to our facilities. If they are determined to have potential alignment, these opportunities would be identified to the Scope 1 and 2 working group as outlined in part c).

- c) As part of Enbridge Gas's Scope 1 and 2 GHG emissions reduction program, which addresses Enbridge Gas's own direct fugitive, vented, flared, and stationary combustion emissions, and indirect electricity emissions, a working group was established to support the identification and implementation of emissions reduction initiatives. The working group consists of functional leads (subject matter experts from Distribution Operations, Buildings/Fleet, Storage and Transmission Operations, and Engineering), and a support group (consisting of representatives from Asset Management, Finance, Regulatory, Energy Transition Planning and Integrated Management System). Identified opportunities are reviewed on a regular basis by the working group, including revisiting any previous assumptions, project costs and the cost of carbon. As part of regular working group meetings, members will work to continue to identify new opportunities.
- d) As indicated in Enbridge Gas's 2024 Rebasing Application, projects are currently assessed and prioritized as part of the annual Asset Management Plan update and managed through the approved capital envelope.⁶

⁵ <https://www.carbinx.com/partners>

⁶ EB-2022-0200, 2024 Rebasing Application, March 8, 2023, Exhibit 1, Tab 10, Schedule 8, p.4, par.8.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Energy Board Staff (STAFF)

Interrogatory

Reference:

Ref 1: Exhibit A, Tab 2, Schedule 1, pages 15-16

Preamble:

Enbridge Gas notes that it has made an effort to procure Emission Performance Units (EPUs) for use towards its 2022 EPS compliance obligation but, to date, no opportunities have been found. Enbridge Gas further notes that with 2022 being the first compliance period under the EPS program, the EPU market is nascent and the availability of EPUs is currently difficult to determine. Finally, Enbridge Gas indicated that the Ministry of Environment, Conservation and Parks will distribute EPUs on or before November 1, 2023 and that if it is able to procure EPUs at a lower price than the excess emissions charge before the 2022 compliance deadline of December 15, 2023, the cost savings will be recorded in the FCCVAs.

Question(s):

- a) Please expand on this discussion and indicate if Enbridge Gas was unable to source any available EPUs on the market or if those EPUs that were available were more costly than the excess emissions charge.
- b) Please indicate if the MECP distributed EPUs by November 1, 2023 and if so, if Enbridge Gas has been able to procure any to-date.

Response:

a) and b)

Prior to submitting the 2024 FCPP Application on September 28, 2023, Enbridge Gas's efforts to procure Emissions Performance Units (EPUs) yielded no results as the Company was unable to source a counterparty selling EPUs into the market. EPUs were subsequently distributed to eligible facilities by MECP in October 2023. Enbridge Gas persisted in its procurement efforts by:

1. Contacting previous credit transaction counterparties.
2. Subscribing to the MECP's distribution list of EPS program participants looking to sell EPU's.
3. Engaging a consultant to assist in sourcing EPS participants selling EPU's.

The first two actions noted above failed to produce any viable credit transactions. The counterparty to Enbridge Gas's previous credit transaction did not have EPU's available for sale and the list of participants circulated by MECP only identified one participant with EPU's available. This list was sent to Enbridge Gas on November 10, 2023, which was insufficient time to complete a credit transaction before the December 1, 2023, deadline to submit 2022 EPS compliance instrument request forms to MECP.

Although Enbridge Gas found the availability of counterparties looking to sell EPU's to be extremely limited, in November 2023 the Company was able to complete one transaction with an EPS participant sourced through a consultant. Enbridge Gas purchased the EPU's at a discount to the excess emissions charge. Through this transaction, Enbridge Gas was able to procure EPU's for use towards its 2022 EPS compliance obligation, at a cost savings of \$0.03 million.

Due to this transaction being completed at the end of November 2023, after finalizing the 2022 FCCVAs balances for clearance in the 2024 FCPP Application and given the immaterial impact of the cost savings to FCCVAs clearance unit rates, Enbridge Gas is proposing to reflect the cost savings in the 2023 Facility Carbon Charge – Variance Accounts (FCCVAs), to be disposed of through the 2025 FCPP Application.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Energy Board Staff (STAFF)

Interrogatory

Reference:

Ref 1: Exhibit B, Tab 1, Schedule 1, page 5

Ref 2: EB-2022-0194, Exhibit B, Tab 1, Schedule 1, page 5

Ref 3: Exhibit D, Tab 1, Schedule 1, page 3

Preamble:

Enbridge Gas indicates that its total 2024 regulated Facility Volume forecast of 144,793 103m³ results in an associated forecast 2024 Facility Carbon Charge of \$7.14 million. As part of its 2023 FCPP application, Enbridge Gas included a 2023 regulated Facility Volume forecast of 189,185 103m³ and subsequent forecast 2023 Facility Carbon Charge cost of \$7.59 million. The forecast cost for facility-related emissions results in a decrease of the Facility Carbon Charge from 0.0159 ¢/m³ to 0.0143 ¢/m³, effective April 1, 2024.

Question(s):

- a) Please discuss what has led to the decrease in forecast regulated facility volumes, and subsequent Facility Carbon Charge amounts, between 2023 and 2024.

Response:

- a) Two key factors led to the decrease in forecast regulated facility-related volumes, which includes both Company Use Volumes and Compressor Fuel Volumes, between 2023 and 2024.

The contributing factor to the decrease in the forecasted Company Use Volumes from 2023 to 2024 is due to the inputs used to derive the forecasts. The Company Use Volume forecasts are based on a two-year average of consumption by location. The actual historical volume data used to calculate the 2024 forecasts was lower than that used for the 2023 forecasts, resulting in a decrease in facility volumes.

The main driver behind the decrease in forecasted compressor fuel, which correlates to the EPS Volume portion of the facility-related volumes, was a result of a decrease in the forecasted physical activity on the Dawn-Parkway system due to changes in

contracted volumes. This results in a reduction of Dawn-Parkway compression required and as such a corresponding reduction in forecasted compressor fuel consumption.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Energy Board Staff (STAFF)

Interrogatory

Reference:

Ref 1: Exhibit C, Tab 1, Schedule 1, pages 4, 6

Ref 2: EB-2022-0194, Exhibit I.STAFF.5, page 2

Preamble:

Enbridge Gas provided its 2022 actual administration costs recorded in the GGEADA with a total amount of \$5.48 million. This represents a difference of only \$0.26 million relative to the 2022 forecast of \$5.21 million.¹ Of all line items, the biggest variances were seen due to an increase of \$0.15 million for Staffing Resources and a decrease of \$0.19 million for consulting and external legal support. Enbridge Gas notes that staffing and wages costs were higher than forecast due to the Carbon Strategy team averaging 6.5 FTEs throughout 2022, one more than the 5.5 FTEs forecast. Enbridge Gas further noted that this increase reflects the resource requirements to facilitate compliance with the GGPPA and EPS Regulation, as well as supporting Enbridge Gas's understanding and responding to new federal and provincial regulations related to GHG emission reductions.

Question(s):

- a) Please discuss how the additional FTE on the Carbon Strategy Team during 2022 was used, and if any particular role was increased from that outlined in the table provided in the interrogatory response to Exhibit I.STAFF.5 in the 2023 FCPP application.
- b) Please elaborate on the decision to rely on more core staffing resources as opposed to consulting resources, particularly considering one of the driving factors for the increase in costs was due to supporting Enbridge Gas's understanding the new regulations.

Response:

- a) The additional FTE joined the Carbon Strategy Team in April 2022 in a specialist role and was included in the interrogatory response to Exhibit I.STAFF.5 of the 2023

FCPP application.¹ As noted in Exhibit I.STAFF.5, this FTE's responsibilities include analysis of the impacts of federal, provincial and municipal policies and regulations related to GHG emissions, climate change and energy transition for Enbridge Gas. Additionally, this FTE participates in government consultation for policy development and regulation amendments associated with federal and provincial regulations related to GHG emissions and leads development of energy transition plans that incorporate the impacts of federal and provincial regulations related to GHG emissions. This FTE has been included in the GGEADA as the role and accountabilities are incremental to what is included in base rates.

- b) This is a time of rapid policy evolution, with all levels of government developing and issuing climate plans, policies and regulations to reduce GHG emissions and help in the transition to a low-carbon economy. Understanding the potential impacts of these continuously evolving and emerging government policies and regulations on Enbridge Gas's operations requires ongoing support, which is better suited to long-term core staffing resources. Engaging external consulting resources for these long periods would result in significantly more expenses than core staffing resources. In addition, core staffing resources have in-depth knowledge and familiarity of the business as a whole and access to collaborate and strategize with other internal departments on an ongoing basis, which are assets that external consultants may not have when it comes to understanding and analyzing the immediate or future impacts of the developing climate policies on the Company's operations.

¹ EB-2022-0194, EGI 2023 FCPP Application, Exhibit I.STAFF.5.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Energy Board Staff (STAFF)

Interrogatory

Reference:

Ref 1: Exhibit C, Tab 1, Schedule 1, pages 11-12

Preamble:

Enbridge Gas notes that various issues have led to its actual 2022 company use volumes to be much lower than forecast, including incorrect heating degree day factors that were first included in 2021 and extended to 2022. Enbridge Gas indicated that the main driver to the \$(1.21) million variance is related to the difference between 2022 forecast regulated EPS emissions and actual regulated EPS emissions due to lower compressor fuel volumes and actual emissions intensity related to transmission and storage operations.

Question(s):

- a) Please confirm that all issues related to forecasting Facility-Related volumes identified over the last several years have been resolved and are not expected to persist.

Response:

- a) The error related to the incorrect heating degree day factors being used in the calculations of the Company Use Volume forecasts was resolved and did not extend to the 2023 forecasts or any forecasts onwards. The other causes noted that have led to actual facility-related volumes to be lower than forecast is largely due to volume changes across Enbridge Gas's system which are inherent in the nature of the business. While Enbridge Gas makes a concerted effort to forecast facility-related volumes as accurately as possible, variances between forecast and actual facility-related volumes are inevitable and the associated variances are captured in the Facility Carbon Charge – Variance Accounts.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Energy Board Staff (STAFF)

Interrogatory

Reference:

Ref 1: Exhibit C, Tab 1, Schedule 1, page 13
Ref 2: Exhibit C, Tab 1, Schedule 1, page 4, Table 1
Ref 3: EB-2022-0194, Exhibit C, Tab 1, Schedule 1, pages 7-10
Ref 4: EB-2022-0194, Exhibit I.STAFF.6(b)
Ref 5: EB-2022-0200, Exhibit I.4.4-STAFF-119

Preamble:

Enbridge Gas estimates that it will incur approximately \$8.80 million in incremental bad debt expenses in 2024 based on forecasted costs recoverable from customers as a results of the GGPPA and EPS Regulation. This amount is only provided for information purposes with the actual 2024 bad debt amount included in a future FCPP application. The table below shows forecast and actual bad debt since 2021.

Year	Forecast	Actual
2021	2.74	1.95
2022	3.72	3.75
2023	5.16	n/a
2024	8.80	n/a

As part of interrogatory responses in its 2023 FCPP application, Enbridge Gas was asked to describe potential steps it can take to reduce bad debt in the future. Enbridge Gas noted it will continue to manage bad debt expense by applying targeted collections activity to improve collections performance and drive reductions in bad debt expense.

As part of interrogatory responses in the rebasing proceeding, Enbridge Gas noted that it has not undertaken any studies to determine the proposed 2024 bad debt expense but did outline its general process for monitoring and administering account closures. Included in the response was an amount of \$11.6 million for “estimated bad debt from carbon”, a sub-set of the total write-off amount of \$33.1 million.

Question(s):

- a) Please discuss the bad debt mitigation efforts taken by Enbridge Gas over the last year and effectiveness of each, particularly with consideration to a large increase of forecast bad debt in 2024 relative to 2023.

- b) Please describe the variables identified by Enbridge Gas to be material contributors to the large increase to forecast bad debt in 2024.
- c) Please discuss the relationship between the estimated bad debt from carbon of \$11.6 noted in EB-2022-0200 and the forecast bad debt noted in this application of \$8.80 million in 2024. Please reconcile these two amounts.

Response:

a) and b)

The forecast increase in bad debt for 2024 is a result of higher arrear balances which can be attributed to several factors such as increasing energy costs, including the annual increase in the Federal Carbon Charge, economic conditions, inflation, unemployment and limited programs available to help customers pay their arrears. In order to address the increase in bad debt, Enbridge Gas applies proactive measures to assist customers, including providing flexible payment options, offering equal billing for the year, implementing low-energy assistance programs (LEAP), and supporting initiatives to enhance energy efficiency and reduce energy costs in homes. These measures are in addition to the regular targeted collections strategies that Enbridge Gas administers to collect past-due balances and drive reductions in bad debt expense, outlined in the interrogatory response Exhibit I.4.4-STAFF-119 of the Rebasing proceeding.

- c) Carbon bad debt is based on a percentage of total Company bad debt as a function of the total FCPP charges billed and total Company revenue, as outlined in Exhibit I.VECC.7 of the 2022 FCPP Application.¹ The data inputs used in the 2024 carbon bad debt forecast of \$8.80 million were derived using the most up-to-date information available at the time of the 2024 FCPP Application, months after the interrogatory process in the Rebasing proceeding. Utilizing current information resulted in a decrease to the percentage of total bad debt to be allocated to carbon bad debt, thus reducing the forecasted 2024 carbon bad debt of \$11.60 million noted through the Rebasing proceeding, to \$8.80 million outlined in the 2024 FCPP Application. Given that bad debt related to carbon is to continue being handled through the FCPP applications, the most current carbon bad debt forecast was provided in the 2024 FCPP Application. As noted in the pre-filed evidence, this forecasted amount is for informational purposes and only actual bad debt related to the GGPPA and EPS Regulation will be recorded in the Carbon Charges Bad Debt Deferral Account.

¹ EB-2021-0209, EGI 2022 FCPP Application, Interrogatory Responses, Exhibit I.VECC.7.