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**Enbridge Gas Inc.**  
500 Consumers Road  
North York, Ontario, M2J 1P8  
Canada

September 29, 2022

**VIA RESS AND EMAIL**

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

Dear Nancy Marconi:

**Re: Enbridge Gas Inc. (Enbridge Gas)  
Ontario Energy Board (OEB) File No.: EB-2022-0194  
2023 Federal Carbon Pricing Program Application  
Application and Evidence**

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Enclosed is the application and pre-filed evidence of Enbridge Gas for its 2023 Federal Carbon Pricing Program (the Application).

Enbridge Gas is seeking OEB approval of just and reasonable rates effective April 1, 2023 for the EGD and Union rate zones, to recover the costs associated with the GGPPA and EPS Regulation as a pass-through to customers. Enbridge Gas is also seeking approval of the proposed rate change reflecting a common Facility Carbon Charge for all customers effective January 1, 2024. Lastly, Enbridge Gas is seeking OEB approval to dispose of the 2021 balances recorded in its FCPP-related deferral and variance accounts effective April 1, 2023.

Subject to the OEB's decision, Enbridge Gas intends to reflect 2023 increases to rates for the Federal Carbon Charge and Facility Carbon Charge, and the one-time billing adjustment related to the disposition of 2021 FCPP-related deferral and variance account balances as early as the April 1, 2023 Quarterly Rate Adjustment Mechanism (QRAM) application.

Enbridge Gas requests that the OEB issue orders granting the approvals requested on a final basis by February 9, 2023. Should the OEB determine that it is not possible to review and grant the approvals requested by such date, Enbridge Gas requests that the OEB grant approval of just and reasonable rates effective April 1, 2023 on an interim basis by February 9, 2023. Given the significance of Enbridge Gas's obligations under the GGPPA and EPS Regulation and considering the magnitude of the associated rate increases, it is appropriate to avoid continued accumulation of unbilled and uncollected

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amounts from customers that could result in a larger impact on bills when such amounts are recovered in the future.

If you have any questions, please contact the undersigned.

Sincerely,

*(Original Signed)*

Asha Patel  
Technical Manager, Regulatory Applications

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## ONTARIO ENERGY BOARD

**IN THE MATTER OF** the *Ontario Energy Board Act*,  
1998, S.O. 1998, c. 15, Sch. B;

**AND IN THE MATTER OF** an application by Enbridge  
Gas Inc., for an order or orders for gas distribution rate  
changes related to compliance obligations under the  
*Greenhouse Gas Pollution Pricing Act*, S.C. 2018, c. 12,  
s. 186.

### APPLICATION

1. Enbridge Gas Inc. (Enbridge Gas), the Applicant, was formed by the amalgamation of Enbridge Gas Distribution Inc. and Union Gas Limited on January 1, 2019 pursuant to the *Ontario Business Corporations Act*, R.S.O. 1990, c. B. 16. Enbridge Gas carries on the business of distributing, transmitting and storing natural gas within Ontario.
2. On June 21, 2018, the *Budget Implementation Act, 2018, No. 1* received Royal Assent. Included in Part V is the *Greenhouse Gas Pollution Pricing Act*, S.C. 2018, c. 12, s. 186 (GGPPA). Under the GGPPA, a federal carbon pricing program (FCPP) applies in whole or in part to any province or territory that requested it or that did not have an equivalent carbon pricing system in place by January 1, 2019. On October 23, 2018, the federal government confirmed that the GGPPA would apply to Ontario.
3. Provinces or territories can submit their own carbon pricing systems to the federal government for approval, and if approved, are not subject to Part 1 and/or Part 2 of the GGPPA.
4. On September 21, 2020, the Province of Ontario announced that the federal government accepted Ontario's carbon pricing system for industrial emitters, known as the Ontario Emissions Performance Standards program (EPS), as an alternative to the federal Output-Based Pricing System (OBPS). On March 29, 2021, the federal government announced that effective January 1, 2022, the EPS will replace the OBPS

in Ontario. The GGPPA was amended on September 1, 2021, to remove Ontario from Part 2 of Schedule 1 of the GGPPA, enabling the EPS to take effect in Ontario as of January 1, 2022.

5. The FCPP is composed of two elements: (i) a charge on fossil fuels (the Federal Carbon Charge) imposed on distributors, importers and producers effective April 1, 2019, and increasing each year on April 1; and (ii) an EPS for prescribed industrial facilities effective January 1, 2022.
6. Enbridge Gas's operations as an integrated natural gas utility in Ontario fall under the purview of the GGPPA and EPS Regulation, which will result in the following costs being incurred:
  - a. Incremental administration and program costs;
  - b. Customer-related Federal Carbon Charge costs for volumes delivered by Enbridge Gas to its residential, commercial and industrial customers who are not covered under the EPS; and
  - c. Facility-related costs (Facility Carbon Charge) arising from Enbridge Gas's facilities and operation of its gas distribution system.
7. Enbridge Gas hereby applies to the OEB, pursuant to the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B (the Act), for:
  - a. an order or orders allowing it to charge customers a Federal Carbon Charge on a volumetric basis, in the amount of the Federal Carbon Charge required to be paid by Enbridge Gas pursuant to the GGPPA, effective April 1, 2023;
  - b. an order or orders approving or fixing just and reasonable rates for all Enbridge Gas rate zones (EGD, Union Northeast, Union Northwest and Union South),<sup>1</sup> effective April 1, 2023, to allow Enbridge Gas to recover

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<sup>1</sup> Collectively, the Union Northeast, Union Northwest and Union South rate zones are referred to as the "Union rate zones".

other costs (including Facility Carbon Charge costs) incurred in compliance with the GGPPA and EPS Regulation;

- c. an order or orders approving the proposed rate change reflecting a common Facility Carbon Charge for all customers, effective January 1, 2024;<sup>2</sup> and
  - d. an order or orders approving the 2021 balances for all FCPP-related deferral and variance accounts, for all Enbridge Gas rate zones, as set out in Exhibit C and for an order to dispose of those balances as early as the April 1, 2023 QRAM.
8. Enbridge Gas further applies to the OEB for all necessary orders and directions concerning pre-hearing and hearing procedures for the determination of this application.
9. This application is supported by written evidence that has been filed with this application and may be amended from time to time as circumstances may require.
10. The persons affected by this application are the customers resident or located in the municipalities, police villages, Indigenous communities and Métis organizations served by Enbridge Gas, together with those to whom Enbridge Gas sells gas, or on whose behalf Enbridge Gas distributes, transmits or stores gas. It is impractical to set out in this application the names and addresses of such persons because they are too numerous.
11. Enbridge Gas requests that the OEB's review of this application proceed by way of written hearing in English.
12. Enbridge Gas requests that all documents relating to this application and its supporting evidence, including the responsive comments of any interested party, be served on Enbridge Gas and its counsel as follows:

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<sup>2</sup> Refer to Exhibit D, Tab 1, Schedule 1 for more information on the proposal to implement a common Facility Carbon Charge for all customers, effective January 1, 2024.



The Applicant:

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-and-

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Dated: September 29, 2022

**Enbridge Gas Inc.**

*(Original Signed)*

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Asha Patel  
Technical Manager, Regulatory Applications  
Regulatory Affairs

## GLOSSARY OF ACRONYMS AND DEFINED TERMS

This glossary is intended to serve as a reference for the benefit of readers in their overall understanding of the terminology used in Enbridge Gas's Application. More detailed definitions may apply to specific terms when used in the context of this Application.

**2019 Application** – Enbridge Gas's 2019 Federal Carbon Pricing Program Application and pre-filed evidence (EB-2018-0205).

**2020 Application** – Enbridge Gas's 2020 Federal Carbon Pricing Program Application and pre-filed evidence (EB-2019-0247).

**2021 Application** – Enbridge Gas's 2021 Federal Carbon Pricing Program Application and pre-filed evidence (EB-2020-0212).

**2022 Application** – Enbridge Gas's 2022 Federal Carbon Pricing Program Application and pre-filed evidence (EB-2021-0209).

**BEI** – Baseline Emissions Intensity

**CCCVA** – Customer Carbon Charge - Variance Account

**CO<sub>2</sub>** – Carbon dioxide.

**CO<sub>2</sub>e** – Carbon dioxide equivalent.

**Company Use** – Volumes of natural gas consumed in the operation of Enbridge Gas's facilities including distribution buildings, boilers/line heaters, and NGV fleet volumes (which are subject to the Federal Carbon Charge under Part 1 of the GGPPA).

**Covered Facility** – An entity registered under the EPS and therefore exempt from the Federal Carbon Charge for volumes of fuel delivered by Enbridge Gas. Covered Facilities are classified as mandatory or voluntary based on annual emissions. Covered Facilities are not exempt from Enbridge Gas’s Facility Carbon Charges or administration-related costs.

**CRA** – Canada Revenue Agency.

**Credits** – Issued by the federal government, under the OBPS, to facilities that achieve annual emissions volumes below their annual output-based emissions limit. Each credit represents one tonne of CO<sub>2</sub>e, can be banked for future use against emissions or traded, has a useful life of five years from the period following the year for which the credit was issued, and will be tracked using a centralized system.

**Customer Volumes** – Distribution volumes delivered by Enbridge Gas in Ontario, except for volumes delivered to customers that hold an Exemption Certificate.

**Customer-Related Obligations** – The obligations under the GGPPA related to GHG emissions associated with the natural gas delivered by Enbridge Gas, other than to Covered Facilities.

**DCQ** – Daily Contract Quantity.

**Distributor** – An entity that imports or delivers marketable and non-marketable natural gas, and/or that measures consumption of marketable natural gas and is required to register as a Distributor under the GGPPA.<sup>1</sup>

**DSM** – Demand Side Management.

**ECCC** – Environment and Climate Change Canada.

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<sup>1</sup> The GGPPA, s.55. <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

**EITE** – Energy Intensive and Trade Exposed.

**EPS** – Ontario Emissions Performance Standards program; effective January 1, 2022, the EPS replaced the OBPS for Covered Facilities. These facilities will have a compliance obligation based on the portion of its emissions that exceed the annual emissions limit.

**EPS Regulation** – The *Greenhouse Gas Emissions Performance Standards* made effective July 4, 2019 under the *Environmental Protection Act*, R.S.O. 1990, c. E. 19, as they may be amended from time to time.<sup>2</sup>

**EPS Volumes** – Volumes of natural gas consumed in the operation of Enbridge Gas's transmission and storage compressor facilities (which are subject to the EPS as Enbridge Gas's transmission and storage system is a "covered facility" under the EPS Regulation effective January 1, 2022).

**EPUs** – Emissions Performance Units issued by the provincial government, under the EPS, to facilities that achieve annual emissions volumes below their annual PS. Each EPU represents one tonne of CO<sub>2</sub>e, can be banked for future use against emissions or traded, has a useful life of five years from the period following the year for which the credit was issued, and will be tracked using a centralized system.

**Exemption Certificate** – A certificate issued by the CRA upon an entity's registration under the EPS, exempting an entity from the application of the Federal Carbon Charge.<sup>3</sup>

**Facility Carbon Charge** – The common volumetric charge proposed by Enbridge Gas, for the EGD rate zone and Union rate zones, to recover the costs resulting from the GGPPA and EPS Regulation related to Enbridge Gas's: (i) Company Use Volumes including distribution buildings, boiler/line heaters and NGV fleet volumes (which are

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<sup>2</sup> The EPS, <https://www.ontario.ca/laws/regulation/r19241>

<sup>3</sup> The GGPPA, s.36. <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

subject to the Federal Carbon Charge under Part 1 of the GGPPA); and, (ii) transmission and storage compression volumes (which are subject to the EPS as Enbridge Gas's transmission and storage system is listed as an industrial activity in Schedule 2 of the EPS Regulation).

**Facility Volumes** – Composed of: (i) Company Use Volumes including distribution buildings, boilers/line heaters, and NGV fleet volumes; and, (ii) transmission and storage compression volumes.

**FCCVA** – Facility Carbon Charge – Variance Account

**FCPP** – As part of the GGPPA, a federal carbon pricing program (also known as the “Backstop”) applies in any province or territory that requested it or that does not have an equivalent carbon pricing system in place that meets federal carbon pricing requirements.<sup>4</sup> The FCPP is composed of the Federal Carbon Charge and an Emissions Performance Standards (EPS) Program. The EPS Program replaced the federal OBPS effective January 1, 2022.

**Federal Carbon Charge** – As part of the FCPP, a charge applied to fossil fuels imposed on distributors, importers and producers applicable from 2019-2030 and equivalent to \$65/tCO<sub>2e</sub> as of April 1, 2023. This charge applies to volumes delivered by Enbridge Gas to its customers (other than Covered Facilities) and to Enbridge Gas's Company Use Volumes (i.e. distribution buildings, boilers/line heaters and NGV fleet volumes).

**FTE** – Full-Time Equivalents.

**GGEADA** – Greenhouse Gas Emissions Administration Deferral Account.

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<sup>4</sup> Government of Canada – Carbon pollution pricing systems across Canada.  
<https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work.html>

**GGPPA** – The *Greenhouse Gas Pollution Pricing Act*, S.C.2018, c 12, s. 186, as amended from time to time.<sup>5</sup>

**GHG** – Greenhouse Gas as set out in Section 3 the GGPPA.<sup>6</sup>

**ktCO<sub>2</sub>e** – Kilo-tonne of carbon dioxide equivalent.

**Listed Province** – A province or territory covered, in whole or in part under the GGPPA.<sup>7</sup>

**Mandatory Participant** – Entities that emit 50 ktCO<sub>2</sub>e or greater annually, where the primary activity engaged in at the facility is listed as an industrial activity under the EPS Regulation, are required to register under the EPS.

**Marketable Natural Gas**<sup>8</sup> – Natural gas that consists of at least 90% methane and that meets the specifications for pipeline transport and sale for general distribution to the public, as defined by the GGPPA.<sup>9</sup>

**MECP** – Ministry of the Environment, Conservation and Parks.

**MW** – Megawatt.

**MWh** – Megawatt hour.

**NGV** – Natural gas vehicle.

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<sup>5</sup> The GGPPA, <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

<sup>6</sup> Ibid, Schedule 3, Greenhouse Gases, Column 1.

<sup>7</sup> Ibid, s.3.

<sup>8</sup> In August 2022, the federal government released a draft amendment to the GGPPA proposing to update the definition of marketable natural gas to “natural gas that meets the specifications for pipeline transport and sale for general distribution to the public”. The effective date of this amendment has not been specified. <https://fin.canada.ca/drleg-apl/2022/ita-lir-0822-d.pdf>

<sup>9</sup> The GGPPA, s.3. <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

**Non-Marketable Natural Gas** – Natural gas other than marketable natural gas, as defined by the GGPPA.<sup>10</sup>

**OBPS** – Output-based pricing system; a component of the FCPP applicable in Ontario from January 1, 2019 to December 31, 2021 that applies to certain registered facilities instead of the Federal Carbon Charge. A registered entity had a compliance obligation based on the portion of its emissions that exceed the annual output-based emissions limit.

**OBPS Regulations** – Output-Based Pricing System Regulations (SOR/2019-266) under the GGPPA published in Canada Gazette II on June 28, 2019, as amended from time to time.<sup>11</sup>

**OBPS Volumes** – Volumes of natural gas consumed in the operation of Enbridge Gas's transmission and storage compressor facilities (which are subject to the OBPS as Enbridge Gas's transmission and storage system is a "covered facility" under Part 2 of the GGPPA, from January 1, 2019 to December 31, 2021).

**OBS** – Output-based standard; a percentage of production-weighted national average emissions intensity applied to annual facility production to determine annual facility emission limits under the OBPS.

**OEB** – Ontario Energy Board.

**Offset Credits** – Represent GHG emissions reductions or removal enhancements generated from Canadian voluntary project-based activities that are not subject to carbon pricing and that would not have occurred under business as usual conditions.<sup>12</sup>

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<sup>10</sup> Ibid.

<sup>11</sup> SOR/2019-266 <http://www.gazette.gc.ca/rp-pr/p2/2019/2019-07-10/html/sor-dors266-eng.html>

<sup>12</sup> <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system.html>



**PS** – Performance Standard; a percentage of the baseline emissions intensity applied to the annual facility production to determine the facility’s total annual emissions limit under the EPS.

**PDCI** – Parkway Delivery Commitment Incentive.

**QRAM** – Quarterly Rate Adjustment Mechanism.

**RNG** – Renewable Natural Gas; also referred to as *Biomethane* in the GGPPA, means a substance that is derived entirely from biological matter available on a renewable or recurring basis and that is primarily methane.

**tCO<sub>2</sub>e** – Metric tonne of carbon dioxide equivalent. The unit of measure of GHG emissions. A quantity of GHG, expressed in tonnes, is converted into tCO<sub>2</sub>e by multiplying the quantity by the applicable global warming potential.<sup>13</sup>

**Voluntary Participant** – Entities that emit between 10 ktCO<sub>2</sub>e and 50 ktCO<sub>2</sub>e annually, where the primary activity engaged in at the facility is listed as an industrial activity under the EPS Regulation may voluntarily register to be part of the EPS.

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<sup>13</sup> The GGPPA, Schedule 3, Column 2. <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

## OVERVIEW

1. The purpose of this evidence is to further outline the application (Application) of Enbridge Gas Inc. (“Enbridge Gas”) for: (i) approval to charge customers a Federal Carbon Charge on a volumetric basis, in the amount of the Federal Carbon Charge required to be paid by Enbridge Gas pursuant to the Greenhouse Gas Pollution Pricing Act (GGPPA), effective April 1, 2023; (ii) approval of just and reasonable rates for all Enbridge Gas rate zones, effective April 1, 2023, to allow Enbridge Gas to recover other costs (including the Facility Carbon Charge costs) incurred in compliance with the GGPPA and the Greenhouse Gas Emissions Performance Standards Regulation (EPS Regulation); (iii) approval of the proposed rate change reflecting a common Facility Carbon Charge for all customers, effective January 1, 2024;<sup>1</sup> and (iv) approval of 2021 balances for all federal carbon pricing program (FCPP) related deferral and variance accounts, for all Enbridge Gas rate zones, and disposition of the same, effective April 1, 2023.
2. Enbridge Gas’s Application is being submitted at this time to facilitate compliance with the GGPPA, the EPS Regulation, and to allow customers to be charged the 2023 Federal Carbon Charge rate for natural gas in a timely fashion without accruing uncharged amounts, in accordance with the FCPP, beginning April 1, 2023.
3. This exhibit of evidence is organized as follows:
  1. Background
    - 1.1 The Federal Carbon Pricing Program
  2. Enbridge Gas’s Obligations Under the GGPPA and EPS Regulation
    - 2.1 Volumes Subject to Federal Carbon Charge
    - 2.2 Volumes Subject to EPS
    - 2.3 Management of Facility-Related Emissions and Costs

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<sup>1</sup> Refer to Exhibit D, Tab 1, Schedule 1 for more information on the proposal to implement a common Facility Carbon Charge for all customers, effective January 1, 2024.

- 3. Bill Impacts
- 4. Requested Approvals

1. Background

- 4. On June 21, 2018, the Budget Implementation Act, 2018, No. 1 received Royal Assent. Part V included the GGPPA. The FCPP applies in whole or in part to any province or territory that requested it or that did not have an equivalent carbon pricing system in place by January 1, 2019. On October 23, 2018, the federal government confirmed that the GGPPA would apply to Ontario.
- 5. As set out at Exhibit D, Tab 1, Schedule 1, Enbridge Gas is seeking OEB approval to increase the Federal Carbon Charge and Facility Carbon Charge to recover the costs associated with meeting its obligations under the GGPPA and EPS Regulation, on a final basis, effective April 1, 2023. Further, as set out at Exhibit C, Tab 1, Schedule 1 and Exhibit D, Tab 1, Schedule 1, Enbridge Gas proposes to clear the final 2021 balance in its OEB-approved FCPP-related deferral and variance accounts.
- 6. On September 21, 2020, the Province of Ontario announced that the federal government accepted Ontario's carbon pricing system for industrial emitters, known as the Ontario Emissions Performance Standards (EPS) program, as an alternative to the federal Output-Based Pricing System (OBPS). On March 29, 2021, the federal government announced that effective January 1, 2022 the Ontario EPS program will replace the federal OBPS. The GGPPA was amended on September 1, 2021 to remove Ontario from Part 2 of Schedule 1 of the GGPPA, enabling the EPS to take effect in Ontario as of January 1, 2022.
- 7. On September 29, 2021, Enbridge Gas filed its 2022 Federal Carbon Pricing Program application (EB-2021-0209) (2022 Application). To reflect the transition from the federal OBPS to the Ontario EPS program and recognize that Enbridge Gas would be subject to both federal and provincial regulations beginning January 1,

2022, in its 2022 Application, Enbridge Gas proposed to amend the accounting orders by updating the applicable account definitions and account names.<sup>2</sup> The OEB approved the amendments to the wording of the FCPP deferral and variance accounting orders as filed in its Decision and Order on Enbridge Gas's 2022 Application.<sup>3</sup>

8. This evidence also includes cost estimates and volume forecasts for 2023 that are meant to be used for informational purposes only. Customers will be charged the Federal Carbon Charge and Facility Carbon Charge based on actual volumes. Enbridge Gas will seek disposition of any variance to forecast for 2023 as well as FCPP-related 2023 administration costs through a future application to the OEB.

#### 1.1 The Federal Carbon Pricing Program

9. The FCPP is composed of two elements:

- a. A charge on fossil fuels (the Federal Carbon Charge) as a cost per unit of fuel, including natural gas (cubic meters or m<sup>3</sup>), imposed on distributors, importers and producers applicable as of April 1, 2019 under Part 1 of the GGPPA. This charge applies to fuel delivered by Enbridge Gas to its customers and to Enbridge Gas's own fuel use within its distribution system (i.e. its Company Use for distribution buildings, boilers/line heaters and Natural Gas Vehicle (NGV) fleet fuel). Exemptions from the Federal Carbon Charge are explained below.

In December 2020, the federal government released its updated climate plan, "A Healthy Environment and A Healthy Economy", outlining the strategy to reduce greenhouse gas (GHG) emissions which included a proposal to increase the Federal Carbon Charge by \$15/tCO<sub>2e</sub> annually starting in 2023,

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<sup>2</sup> EB-2021-0209, EGI 2022 FCPP Application, September 29, 2021, Exhibit C, p.3.

<sup>3</sup> EB-2021-0209, OEB Decision and Order, February 10, 2022, p.10.

increasing to \$170/tCO<sub>2e</sub> in 2030.<sup>4</sup> The federal government confirmed this Federal Carbon Charge increase in July 2021.<sup>5</sup>

The GGPPA has not been amended to include the Federal Carbon Charge rates from 2023 to 2030, however, the federal government released the rates for applicable provinces and territories in December 2021.<sup>6</sup> It is anticipated that the GGPPA will be amended to include the 2023 to 2030 rates in the fall of 2022.

The Federal Carbon Charge is equivalent to \$65 per tonne of carbon dioxide equivalent (tCO<sub>2e</sub>) or 12.39 ¢/m<sup>3</sup> in 2023 (see Table 1). The Federal Carbon Charge became effective April 1, 2019 and increases each subsequent year on April 1.

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<sup>4</sup> [https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/healthy\\_environment\\_healthy\\_economy\\_plan.pdf](https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/healthy_environment_healthy_economy_plan.pdf)

<sup>5</sup> <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-federal-benchmark-information.html>

<sup>6</sup> Fuel Charge Rates for Listed Provinces and Territories for 2023 to 2030, <https://www.canada.ca/en/departement-finance/news/2021/12/fuel-charge-rates-for-listed-provinces-and-territories-for-2023-to-2030.html>

Table 1  
2019 – 2030 Federal Carbon Charge Rates for Marketable Natural Gas<sup>7</sup>

<b>Year</b>	<b>\$/tCO<sub>2</sub>e</b>	<b>¢/m<sup>3</sup></b>
2019	\$20	3.91
2020	\$30	5.87
2021	\$40	7.83
2022	\$50	9.79
2023	\$65	12.39
2024	\$80	15.25
2025	\$95	18.11
2026	\$110	20.97
2027	\$125	23.83
2028	\$140	26.69
2029	\$155	29.54
2030	\$170	32.40

- b. Entities that are covered under the Ontario EPS Regulation are exempt from coverage under Part 1 of the GGPPA, “Fuel Charge” and Part 2 of the GGPPA, “Industrial Greenhouse Gas Emissions”. Under the EPS Regulation, the Ontario Ministry of Environment, Conservation and Parks (MECP) established a mandatory emissions threshold for entities identified as being in an Energy Intensive and Trade Exposed (EITE) sector (facilities which have a primary activity listed in Schedule 2 of the EPS Regulation) of 50 ktCO<sub>2</sub>e or more per year and a voluntary emissions threshold of 10 – 50 ktCO<sub>2</sub>e per year for those entities that choose to voluntarily participate in the EPS. This component of the FCPP became effective January 1, 2022.<sup>8</sup>

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<sup>7</sup> For 2019 to 2022 refer to The GGPPA, Schedule 2 and Schedule 4, <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf> and for 2023 to 2030 refer to Fuel Charge Rates for Listed Provinces and Territories for 2023 to 2030, <https://www.canada.ca/en/departement-finance/news/2021/12/fuel-charge-rates-for-listed-provinces-and-territories-for-2023-to-2030.html>

<sup>8</sup> On March 29, 2021, the federal government announced that Ontario will transition from the federal OBPS to the Ontario EPS effective January 1, 2022 and on September 1, 2021, the Order Amending Part 2 of Schedule 1 to the GGPPA was published in the Canada Gazette, Part II, removing Ontario from Part 2 of the GGPPA as of January 1, 2022.

The EPS creates a pricing incentive to reduce GHG emissions from EITE industrial facilities while limiting the impacts of carbon pricing on their respective competitiveness. Entities subject to the EPS Regulation are required to apply to the MECP and the Canada Revenue Agency (CRA) for exemption from the Federal Carbon Charge. The exemption certificate issued by the CRA must then be submitted to Enbridge Gas to ensure that the entity is not charged the Federal Carbon Charge on its natural gas bill. Participants in the EPS Program are required to report and manage their own compliance obligations and if their annual emissions are greater than the total annual emissions limit, participants will have the following options to satisfy their compliance obligations:<sup>9</sup>

- (i) Pay the excess emissions charge;<sup>10</sup> or
- (ii) Submit emissions performance units (“EPUs”) issued by the provincial government.

The EPS currently has no provision for use of offset credits.

10. The EPS Regulation currently only applies to the year 2022. Under the GGPPA, the federal government assessed provincial and territorial carbon pricing programs against the federal benchmark for the 2018 to 2022 period.<sup>11</sup> On August 5, 2021, the federal government released updated federal benchmarks that provinces and

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<sup>9</sup> MECP: GHG Emissions Performance Standards and Methodology for the Determination of the Total Annual Emissions Limit, July 2019, p.17.

<https://www.ontariocanada.com/registry/showAttachment.do?postingId=28727&attachmentId=41017>

<sup>10</sup> Excess emissions charge is the price per unit in \$/tCO<sub>2</sub>e. The proposed rates of charge are outlined in the Proposed Regulatory Amendments for Emissions Performance Standards Program 2023-2030. For the 2023 compliance period, the excess emissions charge is proposed to be \$65/tCO<sub>2</sub>e.

<https://ero.ontario.ca/notice/019-5769>

<sup>11</sup> Pan-Canadian Approach to Pricing Carbon Pollution, <https://www.canada.ca/en/environment-climate-change/news/2016/10/canadian-approach-pricing-carbon-pollution.html>

territories must meet for 2023 to 2030.<sup>12</sup> The MECP released Proposed Regulatory Amendments for Emissions Performance Standards Program 2023-2030 on August 26, 2022, to implement the program for the 2023 to 2030 period and to meet the updated federal benchmark so that the EPS Program can remain in effect in Ontario.<sup>13</sup> The MECP is engaging with stakeholders on the proposed amendments and targeting release of the finalized amendments to the EPS Regulation in the fall of 2022.

11. Changes to the EPS Regulation for 2023 may impact the costs incurred by Enbridge Gas in complying with the EPS. Any cost impacts to the Facility Carbon Charge due to a change in the estimated EPS compliance obligation will be recorded in the Facility Carbon Charge – Variance Accounts for future disposition.
12. Prior to January 1, 2022, when the Ontario EPS became effective, entities in Ontario, including Enbridge Gas, were covered under Part 2 of the GGPPA, known as the OBPS. Participants in the OBPS were required to report and manage their own compliance obligation and had the following options to satisfy annual emissions that exceeded their sector-based emissions intensity benchmark:<sup>14</sup>

- (i) pay the excess emissions charge;<sup>15</sup>
- (ii) submit surplus credits issued by the federal government (“Credits”);

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<sup>12</sup> Update to the Pan-Canadian Approach to Carbon Pollution Pricing 2023-2030 - Canada.ca. <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-federal-benchmark-information/federal-benchmark-2023-2030.html>

<sup>13</sup> Emissions Performance Standards (EPS) program regulatory amendments for the 2023-2030 period | Environmental Registry of Ontario, <https://ero.ontario.ca/notice/019-5769>

<sup>14</sup> Output Based Standards are included for each industrial activity in Schedule 1 of the OBPS Regulations <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2019-266/page-15.html#h-1185036>

<sup>15</sup> Excess emissions charge is the carbon price in \$/tCO<sub>2</sub>e as outlined in Table 1. Rates of charge applicable from 2019-2022, when the federal OBPS applied in Ontario, are outlined in Schedule 4 of the GGPPA.



- (iii) submit eligible offset credits (“Offset Credits”);<sup>16</sup> or
- (iv) submit eligible Recognized Units.<sup>17</sup>

13. Although the federal OBPS is no longer applicable in Ontario due to the transition to the provincial EPS Program, the OBPS was applicable to Enbridge Gas’s transmission and storage compressor stations in 2021 and therefore costs related to the OBPS are included in the 2021 FCPP-related deferral and variance account balances that Enbridge Gas is seeking disposition of within Exhibit C, Tab 1, Schedule 1.

14. Any natural gas volumes delivered by Enbridge Gas for the period of January 1, 2023 to March 31, 2023 will continue to be charged the Federal Carbon Charge and Facility Carbon Charge rates approved by the OEB as part of Enbridge Gas’s 2022 Application.

15. Enbridge Gas is proposing to implement a common Facility Carbon Charge for all customers, effective January 1, 2024, to align with the Company’s timing to rebase rates for the first time as an amalgamated utility. This ensures that all customers will pay the same Facility Carbon Charge based on consumption. For further details please refer to Exhibit D, Tab 1, Schedule 1, Section 1.2.

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<sup>16</sup> Offset Credits represent greenhouse gas emissions reductions or removal enhancements generated from Canadian voluntary project-based activities that are not subject to carbon pricing and that would not have occurred under business as usual conditions (i.e. the reductions go beyond legal requirements and standard practice). Canada’s GHG Offset Credit System Regulations were published on June 8, 2022. <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system/federal-greenhouse-gas-offset-system.html>

<sup>17</sup> Offset credits generated by federally approved provincial offset protocols. <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system/list-recognized-offset-programs-protocols.html>

## 2. Enbridge Gas's Obligations Under the GGPPA and EPS Regulation

16. As a natural gas utility in Ontario, a “listed province” in the GGPPA, Enbridge Gas is required to register under Part 1 of the GGPPA with the CRA as a “distributor” for volumes of natural gas delivered to its customers.<sup>18</sup>

17. As a “distributor”, Enbridge Gas is required to remit Federal Carbon Charges related to the GGPPA to the Government of Canada monthly.

18. Enbridge Gas is also required to register under the EPS Regulation as a “covered facility” since its transmission and storage operations are covered by an industrial activity listed in Schedule 2 of the EPS Regulation.<sup>19</sup>

19. As a “covered facility” under the EPS Regulation, Enbridge Gas is required to remit payment annually for any excess emissions under the EPS.

20. Enbridge Gas has estimated its 2023 cost of compliance with the GGPPA and EPS Regulation to be approximately \$2,159.41 million: \$1,335.50 million for the EGD rate zone (see Exhibit B, Tab 2 for additional detail) and \$823.91 million for the Union rate zones (see Exhibit B, Tab 3 for additional detail). In addition, Enbridge Gas estimates that it will incur 2023 administrative costs of approximately \$7.20 million associated with the administration of its requirements under the GGPPA and EPS Regulation (see Exhibit C, Tab 1, Schedule 1 for additional detail).

### 2.1 Volumes Subject to Federal Carbon Charge

21. Except for customer volumes that are covered under the EPS, or those that are otherwise fully or partially exempt from the Federal Carbon Charge, all distribution

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<sup>18</sup> The GGPPA, s.55 (1). The GGPPA requires registration of distributors of marketable or non marketable natural gas. <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

<sup>19</sup> The EPS, O.Reg. 241/19. <https://www.ontario.ca/laws/regulation/r19241>

volumes delivered by Enbridge Gas in Ontario (“Customer Volumes”) are covered under Part 1 of the GGPPA and are subject to the Federal Carbon Charge.<sup>20</sup>

22. Under the GGPPA Enbridge Gas is required, on a monthly basis, to:<sup>21</sup>

- calculate and report to the CRA the volume of fuel consumed which is covered under Part 1 of the GGPPA, including Enbridge Gas’s own use within its distribution system (i.e. distribution buildings, boilers/line heaters and NGV fleet volumes); and
- remit the amount of the Federal Carbon Charge in respect of the monthly volume that has been calculated.

#### Forecast Customer Volumes and Costs

23. As set out in Table 1, Enbridge Gas is required to remit the 2023 Federal Carbon Charge rate of 12.39 ¢/m<sup>3</sup> of natural gas consumed for applicable customers from April 1, 2023 to March 31, 2024. As outlined at Exhibit D, Tab 1, Schedule 1 and consistent with Enbridge Gas’s treatment of 2019 to 2022 FCPP-related charges, Enbridge Gas will present these charges as a separate line item on customers’ bills. Enbridge Gas’s forecast cost associated with Customer Volumes for the period of April 1, 2023 to March 31, 2024 is \$2,151.82 million: \$1,334.25 million for the EGD rate zone and \$817.57 million for the Union rate zones (please see Exhibit B for additional detail on costs associated with Customer Volumes for the period of April 1, 2023 to March 31, 2024).

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<sup>20</sup> To calculate Enbridge Gas’s 2023 customer volume forecast at Exhibit B, Tab 2, Schedule 2, and at Exhibit B, Tab 3, Schedule 2, Enbridge Gas excluded customers who have provided Enbridge Gas with an exemption certificate, in accordance with Section 17(2) of the GGPPA. This includes downstream distributors, entities covered under the EPS, and customers who use natural gas in a non-covered activity. RNG volumes, hydrogen volumes and 80% of volumes for eligible greenhouses are also excluded.

<sup>21</sup> The GGPPA, s.68 (2b), s.71 (3). <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

24. These cost estimates are subject to change based on actual distribution volumes and are meant to be used for informational purposes only. Customers will be charged the Federal Carbon Charge rate monthly based on actual billed volumes.
25. Customers that hold an Exemption Certificate must provide a copy to Enbridge Gas no later than two weeks in advance of the first day of the month in which they wish to have their consumption volumes exempted from the Federal Carbon Charge. Similarly, if a customer is no longer eligible to hold an Exemption Certificate, they must provide notice to Enbridge Gas of that fact, as soon as the facility ceases to be eligible for exemption.

*Forecast Company Use Volumes and Costs*

26. As set out in Table 1, Enbridge Gas is required to remit the 2023 Federal Carbon Charge rate of 12.39 ¢/m<sup>3</sup> for natural gas consumed in the operation of Enbridge Gas's facilities which are not covered by the EPS (i.e. distribution buildings, boilers/line heaters and NGV fleet volumes) ("Company Use Volumes"). The costs associated with Company Use Volumes will be recovered from customers as part of the Facility Carbon Charge, as detailed at Exhibit D, Tab 1, Schedule 1, included in delivery or transportation charges on customers' bills. Enbridge Gas's forecast cost associated with Company Use Volumes for the period of April 1, 2023 to March 31, 2024 is approximately \$2.47 million: \$0.75 million for the EGD rate zone and \$1.71 million for the Union rate zones (please see Exhibit B for additional detail on costs associated with Company Use Volumes for the period of April 1, 2023 to March 31, 2024).
27. The forecast Company Use Volumes and associated Facility Carbon Charge cost estimate are subject to change based on actual Facility Volumes.

## 2.2 Volumes Subject to EPS

28. Transmitting natural gas is a covered “industrial activity” under the EPS and includes installations and equipment such as compressor stations, storage installations, and compressor units that have a common owner/operator within a province.<sup>22</sup> For Enbridge Gas, this includes fuel used in transmission and storage compressor facilities (EPS Volumes).

29. Under the EPS, Enbridge Gas is required, on an annual basis, to:

- calculate and report to the Ontario MECP, Enbridge Gas’s covered emissions and total annual emissions limit for each compliance period; and
- provide compensation for, or otherwise obtain EPU, to cover any excess emissions by the applicable deadline.

30. Owners and operators of EPS-covered facilities have a compliance obligation for the portion of the emissions from those facilities that exceed their total annual emissions limit. Under the EPS, a covered facility’s total annual emissions limit is calculated based on the applicable Performance Standard (“PS”) and its associated annual production.<sup>23</sup> The MECP has proposed that the PS for facilities transmitting natural gas is 77.6% of the production-weighted facility baseline emissions intensity in 2023.<sup>24</sup> The costs associated with EPS Volumes will be recovered from customers as part of the Facility Carbon Charge, as detailed at Exhibit D, Tab 1, Schedule 1, included in delivery or transportation charges on customers’ bills. Enbridge Gas’s forecast 2023 (January 1, 2023 to December 31, 2023) regulated cost associated with EPS Volumes is \$5.12 million: \$0.50 million for the EGD rate zone and

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<sup>22</sup> The EPS, O.Reg. 241/19. <https://www.ontario.ca/laws/regulation/r19241>

<sup>23</sup> MECP: GHG Emissions Performance Standards and Methodology for the Determination of the Total Annual Emissions Limit, October 2021.

<https://www.ontariocanada.com/registry/showAttachment.do?postingId=37527&attachmentId=51425>

<sup>24</sup> Proposed Regulatory Amendments for EPS Program 2023-2030, p.16.

<https://prodenvironmentalregistry.s3.amazonaws.com/202208/Proposed%20Regulatory%20Amendments%20for%20EPS%20Program%202023-2030.pdf>

\$4.63 million for the Union rate zones (please see Exhibit B for additional detail on costs associated with EPS Volumes for the period of January 1, 2023 to December 31, 2023).

### 2.3 Management of Facility-Related Emissions and Costs

31. Consistent with Enbridge Gas's commitment in the 2021 Application "...to identify, track and report on emission reduction opportunities using criteria that effectively balance management of its compliance obligations under the FCPP, estimated capital costs, safety and operational reliability,"<sup>25</sup> and the OEB's Decision and Order on the 2022 Application that "Enbridge Gas's next FCPP application set out in a comprehensive fashion the management of Enbridge's own obligations that identifies its approaches towards achieving efficiencies and reduction of carbon emission related costs to its customers", this section of evidence contains details on the potential options for reducing Enbridge Gas's facility-related emissions and associated costs.<sup>26</sup> Facility-related emissions and associated costs can be reduced through the reduction of either Company Use Volumes or OBPS/EPS Volumes, or, in the case of OBPS/EPS emissions, through the use of lower cost compliance options.

#### Facility-Related Volume Reductions

32. To support the achievement of federal, provincial and Enbridge Inc. GHG emission targets, and to support the reduction of facility-related emissions costs, Enbridge Gas is developing and implementing an emission reduction strategy for emissions resulting directly from Enbridge Gas's operations. This strategy covers emissions from combustion of fuels in Company-operated buildings, equipment and vehicles, and methane emissions from venting and leaked natural gas.

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<sup>25</sup> EB-2020-0212, EGI 2021 FCPP Application, September 30, 2020, Exhibit A, p. 14.

<sup>26</sup> EB-2021-0209, OEB Decision and Order, February 10, 2022, p.10.

33. Enbridge Gas's facility-related emissions covered under the GGPPA and EPS only include stationary combustion and flaring emissions, and therefore only opportunities which address these emissions sources will be further discussed in this evidence. Opportunities to reduce GHG emissions from fugitive and vented sources will be discussed in Enbridge Gas's upcoming Rebasing Application.
34. In order to prioritize emission reduction opportunities, Enbridge Gas has classified GHG reduction opportunities as follows:
- a) Business as Usual (BAU) Opportunities – planned emissions reductions included in the Asset Management Plan (AMP), including improved operating practices, modernization, and current and emerging policies and regulations. Although these opportunities are part of Enbridge Gas's GHG Reduction Strategy work, they are being driven by the Company's standard operational maintenance program; and
  - b) High Impact/Low Risk Opportunities – emissions reductions opportunities that are not already included in the AMP.
35. Opportunities identified to date with the potential to reduce EPS volumes are listed below in Table 2 and Table 3. Table 2 provides a summary of the opportunities that Enbridge Gas is implementing to reduce emissions and facility-related costs. Table 3 provides a summary of additional opportunities to reduce emissions and facility-related costs that Enbridge Gas has identified, however are not considered feasible at this point in time.
36. The cost per tonne of GHG emissions shown for each opportunity in Table 2 and Table 3 was calculated using a Discounted Cash Flow analysis (cost represented by a positive \$/tCO<sub>2</sub>e figure and savings represented by a negative \$/tCO<sub>2</sub>e figure). Cash outflows include incremental capital costs of each opportunity. Cash inflows include resulting natural gas savings, avoided carbon charges, any other incremental O&M costs or savings, income tax impacts and any operating costs or

savings resulting from the opportunity. The net present value (NPV) of cash inflows and outflows is divided by the total estimated emissions avoided over the life of the project to determine the \$/tCO<sub>2</sub>e.

Table 2  
Facility-Related Emission Reduction Project Summary – In-Progress Opportunities

Opportunity		Total Estimated Capital Cost (\$millions)	Estimated Emissions Reductions – 2021 (tCO <sub>2</sub> e)	Forecasted Emissions Reductions – 2023 (tCO <sub>2</sub> e)	Forecasted Project Emissions Reductions (tCO <sub>2</sub> e) <sup>27</sup>	Cost per Tonne of GHG Emissions (\$/tCO <sub>2</sub> e)
1	Storage and Transmission Operations (STO) Online Monitoring	0.05	475	1,100 <sup>28</sup>	1,100	-32
2	Air Filter Replacements for Turbines	0 <sup>29</sup>	100	160	1,500	-47

37. The STO online monitoring opportunity continues to increase energy efficiency of our fleet with three units being brought online in 2021. Implementation of online monitoring on applicable units was completed in 2022, with the final unit being brought online.

38. The air filter replacements for turbines opportunity is ongoing, with higher efficiency filters being installed on applicable units at the next filter change opportunity.

39. The online monitoring and air filter replacements for turbines opportunities were driven by Enbridge Gas's standard operational maintenance program and therefore

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<sup>27</sup> Forecasted total annual project emissions reductions once project is fully implemented.

<sup>28</sup> No additional units to be brought online post 2022, and therefore forecasted emissions reductions for 2023 will be the same as the forecasted project emission reductions.

<sup>29</sup> Initial O&M costs for the air filter replacement program are estimated to be \$10,000 but once the program is fully implemented, it is estimated that there will be an O&M savings of approximately \$150,000/year.



Enbridge Gas is not seeking cost recovery for these opportunities through this Application.

Table 3  
Facility-Related Emission Reduction Project Summary – Currently Not Feasible Opportunities

	Opportunity	Total Estimated Capital Cost (\$millions)	Forecasted Project Emissions Reductions (tCO <sub>2e</sub> ) <sup>30</sup>	Cost per Tonne of GHG Emissions (\$/tCO <sub>2e</sub> )
1	Electric Drive Compressors – Dawn Plant C Replacment	70	1,600	105
2	Electric Drive Compressors - Parkway	140	12,000	199
3	Re-wheeling Turbines	17	3,100	191
4	Compressor Fuel Switch to RNG	0 <sup>31</sup>	275,000	166
5	Own Use Gas Fuel Switch to RNG Blend (5%)	0 <sup>32</sup>	1,600	166

40. The Dawn Plant J Twinning opportunity from the 2022 Application has been updated to Dawn Plant C Electrification and Parkway (A) Electricification as the replacement of these two units aligns with the compressor modernization strategy. Electrification will be considered as an alternative for both of these engine replacements as part of the modernization strategy.

41. Re-wheeling Turbines, Compressor Fuel Switch to RNG and Own Use Gas Fuel Switch to RNG Blend (5%) are currently not feasible due to the high costs per tonne as compared to the excess emissions charge.

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<sup>30</sup> Forecasted total annual project emissions reductions once project is fully implemented.

<sup>31</sup> It is estimated that the incremental O&M costs will be approximately \$127 million/year once fully implemented.

<sup>32</sup> It is estimated that the incremental O&M costs will be approximately \$0.7 million/year once fully implemented.

42. The Compression Modernization Strategy in the AMP is a long-term plan to replace identified compression. Under this project several factors are being considered in the evaluation of alternatives, including meeting the operating requirements for the storage and transmission systems, reliability, environmental compliance, and GHG emissions reduction strategy. Ongoing modernization of Enbridge Gas's compressor fleet is expected to reduce EPS emissions in the long-term.
43. As part of Enbridge Gas's 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. Part of the process is to continue to identify new opportunities, and further assess those opportunities that have been previously identified.
44. Actual GHG emissions and reductions in OBPS/EPS costs resulting from these opportunities will be reflected in Enbridge Gas's future FCPP applications for clearance of FCPP-related deferral and variance accounts.

*OBPS and EPS Compliance Cost Reductions*

45. Enbridge Gas has alternative compliance options to satisfy its annual OBPS and EPS compliance obligation aside from paying the excess emissions charge, including the purchase of Credits or EPU's from other OBPS or EPS participants, respectively, and in the OBPS purchasing Offset Credits or eligible Recognized Units.
46. To reduce costs related to its 2021 OBPS compliance obligation, Enbridge Gas pursued opportunities to purchase viable compliance units including Credits and eligible Recognized Units, which generally sold at a price slightly lower than the excess emissions charge. Offset credits were unavailable due to the delayed implementation of the Federal Offset Program.

47. Although Enbridge Gas found the availability of Credits and eligible Recognized Units to be limited, the Company was able to procure eligible compliance units to satisfy 53% of its total 2021 OBPS compliance obligation, at a cost savings of \$0.09 million. The 2021 account balances within the Facility Carbon Charge – Variance Accounts (“FCCVAs”) that Enbridge Gas is seeking disposition of reflect this cost savings.
48. Enbridge Gas anticipates that it will fulfill the remainder of its 2021 OBPS compliance obligation by paying the excess emissions charge of \$40/tCO<sub>2</sub>e.<sup>33</sup>
49. For Enbridge Gas’s 2023 EPS compliance obligation, the availability and market attributes of EPU’s will be reviewed to determine if they present a viable means of reducing compliance costs. With 2022 being the first compliance period under the EPS program and the first EPU’s not being distributed until the second half of 2023, only a few months before the first compliance deadline, Enbridge Gas anticipates that the availability of EPU’s in 2023, for use towards its 2022 EPS compliance obligation, will be limited. Additionally, the EPS Regulations allow an entity to hold EPU’s in their account for use towards a future compliance period which could reduce the supply of EPU’s sold into the market, especially for the first compliance year.<sup>34</sup> The EPS Regulation also does not allow for the use of Offset Credits as a viable compliance option.
50. If Enbridge Gas procures EPU’s at a lower price than the excess emissions charge, the difference between these two costs will be recorded in the FCCVAs and Enbridge Gas will seek to dispose of those amounts through a future FCPP application.<sup>35</sup>

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<sup>33</sup> The GGPPA, Schedule 4, <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf>

<sup>34</sup> EPU’s can be banked for the duration of their useful life which is five years after the compliance period for which the credit was issued.

<sup>35</sup> EB-2019-0247, Exhibit I.STAFF.8 b) and c), June 18, 2020; EB-2019-0247, Enbridge Gas Reply Argument, July 16, 2020, p. 12.

51. Additional administrative costs may be incurred, such as increased staffing, and legal and consulting costs, in order to pursue and acquire EPU's. All actual administrative costs incurred will be recorded in the Greenhouse Gas Emissions Administration Deferral Accounts and Enbridge Gas will seek to dispose of those amounts through a future FCPP application.

### 3. Bill Impacts

52. The bill impact of the 2023 carbon charges for a typical residential customer with annual consumption of 2,400 m<sup>3</sup> is an increase of \$62.42 per year in the EGD rate zone. The bill impact of the 2023 carbon charges for a typical residential customer with annual consumption of 2,200 m<sup>3</sup> is an increase of \$57.24 per year in the Union rate zones. The bill impact of the proposed common Facility Carbon Charge effective January 1, 2024 is an increase of \$0.19 per year in addition to the increase proposed for April 1, 2023 for the EGD rate zone and a decrease of \$0.01 per year in addition to the increased proposed for April 1, 2023 for the Union rate zones.

53. The bill impact of the proposed 2021 FCPP-related deferral and variance account balance disposition for a typical residential customer with annual consumption of 2,400 m<sup>3</sup> is \$1.17 in the EGD rate zone. The bill impact of the proposed 2021 FCPP-related deferral and variance account balance disposition for a typical residential customer with annual consumption of 2,200 m<sup>3</sup> is \$0.42 in the Union South rate zone and \$0.53 in the Union North rate zone.

### 4. Requested Approvals

54. As the costs to comply with the GGPPA and EPS Regulation in 2023 form part of Enbridge Gas's ongoing operating costs as a utility, and consistent with Enbridge Gas's 2022 Application, Enbridge Gas proposes to continue to treat all prudently incurred costs of compliance with the GGPPA and EPS Regulation as a pass-through to customers (Y Factor).

55. Through this Application and by February 9, 2023, Enbridge Gas is seeking:

- a) OEB approval of rates to be applied to customer bills beginning April 1, 2023.  
Following the issuance of the OEB's Decision and Order for this Application, Enbridge Gas intends to reflect 2023 rate increases associated with the Federal Carbon Charge and other costs (including the Facility Carbon Charge costs) incurred in compliance with the GGPPA and EPS Regulation as early as part of its April 1, 2023 QRAM application.
- b) OEB approval of the proposed rate change reflecting a common Facility Carbon Charge for all customers, effective January 1, 2024.<sup>36</sup>
- c) OEB approval to dispose of the 2021 balances recorded in Enbridge Gas's FCPP-related deferral and variance accounts effective April 1, 2023.  
Following the issuance of the OEB's Decision and Order for this Application, Enbridge Gas intends to dispose of these balances as a one-time adjustment as early as part of the April 1, 2023 QRAM.

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<sup>36</sup> Refer to Exhibit D, Tab 1, Schedule 1 for more information on the proposal to implement a common Facility Carbon Charge for all customers, effective January 1, 2024.

## FORECASTS - OVERVIEW

1. The purpose of this exhibit is to provide Enbridge Gas's forecast of volumes and the associated forecasted costs of complying with the GGPPA and EPS Regulation for each of the EGD and Union rate zones.<sup>1</sup>
2. This exhibit of evidence is organized as follows:
  1. Exhibit B, Tab 2, Schedule 1: Forecasts - EGD Rate Zone
  2. Exhibit B, Tab 3, Schedule 1: Forecasts - Union Rate Zones

### 1. Forecast Period

3. In this Application, Enbridge Gas has forecast volumes and associated costs in alignment with the annual effective date of changes to the Federal Carbon Charge and the EPS:
  - For volumes subject to the Federal Carbon Charge (including customer-related and facility-related volumes) – April 1, 2023, to March 31, 2024; and
  - For volumes subject to the EPS (including facility-related volumes) – January 1, 2023, to December 31, 2023.
4. Natural gas volumes delivered by Enbridge Gas for the period of January 1, 2023, to March 31, 2023, will continue to be charged the Federal Carbon Charge and Facility Carbon Charge rates approved by the OEB as part of Enbridge Gas's 2022 Application.

### 2. Forecast 2023 Total Volume and Carbon Cost

5. Enbridge Gas's total 2023 regulated volume forecast subject to the GGPPA and the EPS is 17,556,590 10<sup>3</sup>m<sup>3</sup>.<sup>2</sup> This results in an associated forecast 2023 total cost of

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<sup>1</sup> Forecast administration costs of complying with the GGPPA and EPS Regulation are detailed at Exhibit C, Tab 1, Schedule 1.

<sup>2</sup> Total of regulated customer and facility-related volumes for the EGD rate zone and Union rate zones. Calculated as: Exhibit B, Tab 2, Schedule 2, Col. 3, Line 13 + Exhibit B, Tab 2, Schedule 3, Col. 1, Line 6 + Exhibit B, Tab 3, Schedule 2, Col. 3, Line 16 + Exhibit B, Tab 3, Schedule 3, Col. 1, Line 6.

\$2,159.41 million. The details of this volume forecast, and associated cost are included at Exhibit B, Tab 2, Schedule 1 for the EGD rate zone and at Exhibit B, Tab 3, Schedule 1 for the Union rate zones.

### 3. Forecast 2023 Customer Volume and Federal Carbon Charge Cost

6. Enbridge Gas's total 2023 Customer Volume forecast subject to the Federal Carbon Charge is 17,367,405 10<sup>3</sup>m<sup>3</sup> for the period of April 1, 2023, to March 31, 2024.<sup>3</sup> This results in an associated forecast 2023 Federal Carbon Charge cost of \$2,151.82 million. This cost estimate is subject to change based on actual distribution volumes and is meant to be used for informational purposes only. Customers will be charged the Federal Carbon Charge rate monthly based on actual billed volumes.
7. To estimate the Customer Volume forecast, Enbridge Gas excluded customer volumes exempt from Part 1 of the GGPPA, including customer volumes qualifying for exemption for non-covered activities,<sup>4</sup> volumes of renewable natural gas (RNG),<sup>5</sup> volumes of hydrogen,<sup>6</sup> and EPS registered customer volumes with emissions exceeding 10 ktCO<sub>2</sub>e.<sup>7</sup> Enbridge Gas also excluded volumes delivered to downstream distributors, including those distributors that are out of province, which are also exempt from Part 1 of the GGPPA. Further, Enbridge Gas excluded 80% of the volumes delivered to commercial greenhouse operators.<sup>8</sup>

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<sup>3</sup> Calculated as: Exhibit B, Tab 2, Schedule 2, Col. 3, Line 13 + Exhibit B, Tab 3, Schedule 2, Col. 3, Line 16.

<sup>4</sup> Under the GGPPA, entities that use natural gas which is not put into a fuel system that produces heat or energy and those entities that use natural gas: (i) as a raw material in an industrial process that produces another fuel, substance, material or thing; or (ii) as a solvent or diluent in the production or transport of crude bitumen or another substance, material or thing, meet the definition of a non-covered activity and may be exempt from Part 1 of the GGPPA.

<sup>5</sup> Under the GGPPA, biomethane, also known as RNG, is exempt from the Federal Carbon Charge.

<sup>6</sup> In August 2022, the federal government released a draft amendment to the GGPPA, proposing to exempt hydrogen from the Federal Carbon Charge in proportion to the amount of hydrogen blended with the natural gas. <https://fin.canada.ca/drleg-apl/2022/ita-lir-0822-d.pdf>

<sup>7</sup> The 2023 Customer Volume forecast excludes customer volumes from mandatory and voluntary participants of the EPS, that are exempt from the Federal Carbon Charge under Part 1 of the GGPPA.

<sup>8</sup> Under the GGPPA, greenhouse operators receive partial relief of 80% of the Federal Carbon Charge for natural gas used in the operation of a commercial greenhouse.

8. Customers exempt from Part 1 of the GGPPA who have provided Enbridge Gas their Exemption Certificate, which is issued to the customer upon registration with the CRA, will continue to be exempted unless they otherwise notify Enbridge Gas that they are no longer eligible for exemption. Enbridge Gas will also exempt any additional eligible customers who submit an Exemption Certificate in the future. For those customers covered under the EPS or undertaking non-covered activities, Enbridge Gas will exempt the customer on the date provided by the CRA on the customer's CRA-issued registration confirmation letter. For customers operating commercial greenhouses, exemption will begin the first day of the calendar month following the month in which they provide Enbridge Gas with their Exemption Certificate.
9. The Exemption Certificate indicates that a customer is fully or partially exempt from paying the Federal Carbon Charge on their natural gas combustion fuel delivered by Enbridge Gas. Enbridge Gas uses a customer declaration form to identify which of a customer's accounts are exempt from the Federal Carbon Charge. Enbridge Gas also requests, and maintains on file, copies of each customer's CRA-issued Exemption Certificate and registration confirmation letter.
10. Enbridge Gas exempts customers from the Federal Carbon Charge in its billing systems based on the accounts listed on the customer declaration form, provided a CRA-issued Exemption Certificate and registration confirmation letter have been provided.<sup>9</sup> Customers who are no longer eligible for an exemption from Part 1 of the GGPPA are required, as stated on Enbridge Gas's declaration form, to notify Enbridge Gas of any changes to the information that they had initially provided. Upon receipt of such notification, Enbridge Gas will process the change within its billing systems effective at either the start of the next calendar month, or the next compliance period, whichever is applicable.

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<sup>9</sup> Registration confirmation letters are not applicable to commercial greenhouse customers.



11. Under Part 1 of the GGPPA, biomethane, also known as RNG, is not subject to the Federal Carbon Charge. This includes volumes of RNG nominated by direct purchase customers and RNG procured as part of OptUp, Enbridge Gas's voluntary RNG program.
12. Enbridge Gas uses a RNG declaration form to have direct purchase customers declare their RNG usage and identify which customer accounts are eligible to receive exemption from the Federal Carbon Charge. For forecasting purposes, customers who have nominated their own RNG supply in 2022 were assumed to continue in 2023.
13. Volumes of RNG in OptUp were incorporated into the 2023 Customer-Related Volume forecasts based on the forecast provided in Exhibit C, Tab 2, Schedule 3 of the Voluntary Renewable Natural Gas Program Application (EB-2020-0066).
14. In August 2022, the federal government released a legislative proposal which outlined draft regulations amending the GGPPA to exempt hydrogen from the Federal Carbon Charge in proportion to the amount of hydrogen blended with the natural gas.<sup>10</sup> The effective date of this amendment has not been specified. Enbridge Gas anticipates that this amendment will go into force on or before April 1, 2023, and as such has incorporated forecasted quantities of blended hydrogen into the 2023 Customer-Related Volume forecast based on the estimated quantities provided by Enbridge Gas in the interrogatory response to Exhibit I.H2GO.2 of the Low Carbon Energy Project Application (EB-2019-0294).
15. Enbridge Gas is working to understand the impacts of this draft amendment and the system updates that may be required to exempt the Federal Carbon Charge on a customer's hydrogen usage.

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<sup>10</sup> <https://fin.canada.ca/drleg-apl/2022/ita-lir-0822-d.pdf>

#### 4. Forecast 2023 Facility Volume and Facility Carbon Charge Cost

16. Enbridge Gas's total 2023 regulated Facility Volume forecast is 189,185 10<sup>3</sup>m<sup>3</sup>.<sup>11</sup>

This results in an associated forecast 2023 Facility Carbon Charge cost of \$7.59 million. Facility Volumes are based on the amount of natural gas required for Enbridge Gas to operate its facilities as well as the emissions resulting from the distribution of natural gas. Facility Volumes are composed of: (i) Company Use Volumes including distribution buildings, boilers/line heaters, and NGV fleet volumes (which are subject to the Federal Carbon Charge under Part 1 of the GGPPA) for the period of April 1, 2023 to March 31, 2024; and, (ii) transmission and storage compression volumes (which are subject to the EPS as Enbridge Gas's transmission and storage system is a "covered facility" under the EPS Regulation) for the period of January 1, 2023 to December 31, 2023. The parameters underpinning Enbridge Gas's estimated EPS compliance obligation can be found at Exhibit B, Tab 1, Schedule 1, Appendix A. The forecast 2023 Facility Volume and associated Facility Carbon Charge cost estimate are subject to change based on actual Facility Volumes.

17. On August 26, 2022, the MECP released Proposed Regulatory Amendments for Emissions Performance Standards Program 2023-2030, outlining draft changes to the EPS for the 2023 to 2030 period to meet the benchmark set by the federal government.<sup>12</sup> Applicable proposed program components such as the declining stringency factor for 2023 and the excess emissions charge of \$65/tCO<sub>2</sub>e have been incorporated into Enbridge Gas's 2023 EPS forecast.

18. Changes to the EPS Regulation for 2023 may impact the costs incurred by Enbridge Gas in complying with the EPS. Any cost impacts to the Facility Carbon Charge due

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<sup>11</sup>Calculated as: Exhibit B, Tab 2, Schedule 3, Col. 1, Line 6 + Exhibit B, Tab 3, Schedule 3, Col. 1, Line 6.

<sup>12</sup>Emissions Performance Standards (EPS) program regulatory amendments for the 2023-2030 period | Environmental Registry of Ontario, <https://ero.ontario.ca/notice/019-5769>

to a change in the estimated EPS compliance obligation will be recorded in the Facility Carbon Charge – Variance Accounts for future disposition.

## ENBRIDGE GAS ESTIMATED EPS COMPLIANCE OBLIGATION

1. On July 4, 2019, the government of Ontario filed the *Greenhouse Gas Emissions Performance Standards Regulation* (EPS Regulation) as an alternative to the federal OBPS program.<sup>1</sup> Enbridge Gas's storage and transmissions system is considered a "covered facility" under the EPS Regulation. On September 1, 2021 the *Order Amending Part 2 of Schedule 1 to the Greenhouse Gas Pollution Pricing Act* was published in the *Canada Gazette*, Part II, which removes Ontario from Part 2 of Schedule 1 of the GGPPA as of January 1, 2022.<sup>2</sup> Based on the EPS Regulation, the annual compliance obligation under EPS is calculated as follows:

***Compliance Obligation (tCO<sub>2</sub>e) =***

*Annual Facility Emissions – Total Annual Emissions Limit*

*Where:*

***Annual Facility Emissions (tCO<sub>2</sub>e) =***

*Annual EPS Emissions<sup>3</sup>*

***Total Annual Emissions Limit (tCO<sub>2</sub>e) =***

*BEI (tCO<sub>2</sub>e/production units) × SF (%) × Annual Production (production units)*

2. For forecasting purposes, the total annual emissions limit was based on the facility Baseline Emissions Intensity (BEI), along with the proposed 2023 stringency factor (SF)<sup>4</sup> and the facility specific Performance Standard (PS) calculation methodology, as outlined in the MECP's GHG Emissions Performance Standards and Methodology for the Determination of the Total Annual Emissions Limit, Formula 3.1.5-3.<sup>5</sup>

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<sup>1</sup> Ontario Regulation 241/19. <https://www.ontario.ca/laws/regulation/r19241#BK29>

<sup>2</sup> <https://canadagazette.gc.ca/rp-pr/p2/2021/2021-09-01/html/sor-dors195-eng.html>

<sup>3</sup> Ontario Regulation 390/18, s. 12(1). <https://www.ontario.ca/laws/regulation/180390>

<sup>4</sup> Proposed Regulatory Amendments for EPS Program 2023-2030. <https://prod-environmental-registry.s3.amazonaws.com/202208/Proposed%20Regulatory%20Amendments%20for%20EPS%20Program%202023-2030.pdf>

<sup>5</sup> MECP: GHG Emissions Performance Standards and Methodology for the Determination of the Total Annual Emissions Limit, October 2021, p. 18.

<https://www.ontariocanada.com/registry/showAttachment.do?postingId=37527&attachmentId=51425>

3. Forecast annual production is forecast compressor energy use based on the following formula:

***Energy (MWh)<sup>6</sup> =***

*Rated Compressor Brake Power (MW) × Load (%) × Operating Hours (h)*

*Where:*

***Load (%) =***

*The % load of the engine*

*-or-*

*Calculated by Average Annual Speed (RPM) ÷ Max Rated Speed (RPM)*

4. To forecast the annual production value for 2023, Enbridge Gas has calculated the compressor energy use in MWh for 2019 to 2021 and used an average of this data. Enbridge Gas's detailed calculations of the 2023 forecast EPS emissions, total annual emissions limit, EPS compliance obligation and EPS facility carbon cost for each of the EGD rate zone and Union rate zones can be found at Exhibit B, Tab 2, Schedules 4 to 6 and at Exhibit B, Tab 3, Schedules 4 to 6, respectively.

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<sup>6</sup> Amount of work required by a compressor to transport gas.

## FORECASTS - EGD RATE ZONE

1. The purpose of this evidence is to provide Enbridge Gas's 2023 forecast of volumes and the associated forecasted costs of complying with the GGPPA and the EPS Regulation, for the EGD rate zone.
2. This tab of evidence is organized as follows:
  1. Forecast 2023 Volume and Carbon Cost
  2. Forecast 2023 Customer Volumes and Federal Carbon Charge Cost
  3. Forecast 2023 Facility Volumes and Facility Carbon Charge Cost
    - 3.1. Company Use Volumes
    - 3.2. EPS Volumes

### 1. Forecast 2023 Volume and Carbon Cost

3. The EGD rate zone 2023 regulated volume forecast subject to the GGPPA and EPS Regulation is 10,787,168  $10^3\text{m}^3$ .<sup>1</sup> This results in an associated forecast 2023 total cost of \$1,335.50 million. The details of this volume forecast and associated cost are included at Exhibit B, Tab 2, Schedules 2 to 6. The forecast employs the same methodologies which underpinned forecasts previously approved by the OEB. Enbridge Gas has excluded unregulated non-utility storage volumes and associated costs. Non-utility costs are those associated with Enbridge Gas's unregulated non-utility storage business.

### 2. Forecast 2023 Customer Volumes and Federal Carbon Charge Cost

4. The EGD rate zone total 2023 Customer Volume forecast subject to the Federal Carbon Charge is 10,768,746  $10^3\text{m}^3$  as detailed at Exhibit B, Tab 2, Schedule 2. This results in an associated forecast 2023 Federal Carbon Charge cost of \$1,334.25 million as detailed at Exhibit B, Tab 2, Schedule 6. Enbridge Gas has

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<sup>1</sup>Calculated as: Exhibit B, Tab 2, Schedule 2, Col. 3, Line 13 + Exhibit B, Tab 2, Schedule 3, Col. 1, Line 6.

included forecast distribution volumes subject to the Federal Carbon Charge for all rate classes within the EGD rate zone as detailed at Exhibit B, Tab 2, Schedule 2. The cost estimates are subject to change and are meant to be used for informational purposes only. Customers will be charged the Federal Carbon Charge monthly based on actual billed volumes.

### 3. Forecast 2023 Facility Volumes and Facility Carbon Charge Cost

5. The EGD rate zone 2023 regulated Facility Volume forecast is 18,421  $10^3\text{m}^3$  as detailed at Exhibit B, Tab 2, Schedule 3. This results in an associated forecast 2023 Facility Carbon Charge cost of \$1.25 million as detailed at Exhibit B, Tab 2, Schedule 6. Facility Volumes are composed of: (i) Company Use Volumes including distribution buildings, boilers/line heaters, and NGV fleet volumes (which are subject to the Federal Carbon Charge under Part 1 of the GGPPA); and (ii) EPS Volumes which includes compressor fuel (which is subject to the EPS as Enbridge Gas's storage and transmission system is a "covered facility" under the EPS Regulation). The forecast 2023 regulated Facility Volume and associated forecast Facility Carbon Charge cost estimates are based on the best available information at this time and are subject to change based on actual Facility Volumes.

#### 3.1 Company Use Volumes

6. The regulated Company Use Volume forecast for 2023 including distribution buildings, boilers/line heaters and NGV fleet volumes for the EGD rate zone is 6,076  $10^3\text{m}^3$  as detailed at Exhibit B, Tab 2, Schedule 3. This results in an associated forecast 2023 Facility Carbon Charge cost of \$0.75 million as detailed at Exhibit B, Tab 2, Schedule 6.

### 3.2 EPS Volumes

7. The EPS Volume forecast for 2023 for the EGD rate zone is 16,298 10<sup>3</sup>m<sup>3</sup> as detailed at Exhibit B, Tab 2, Schedule 3.<sup>2</sup> The corresponding forecast 2023 EPS obligation of 10,069 tCO<sub>2</sub>e results in a Facility Carbon Charge cost of \$0.65 million as detailed at Exhibit B, Tab 2, Schedules 5 and 6. Of the \$0.65 million, \$0.50 million is attributable to Enbridge Gas's regulated operations in the EGD rate zone.
8. The EPS Volume forecast is derived by combining forecasts for regulated utility and unregulated non-utility compression activity into an overall physical activity forecast. Enbridge Gas has excluded unregulated non-utility compression volumes and associated costs in deriving the Facility Carbon Charge cost to be recovered in regulated rates. The EPS Volume forecast for the EGD rate zone includes storage compression and dehydration fuel.
9. Enbridge Gas's detailed calculations of the 2023 forecast compressor emissions, total annual emissions limit, EPS compliance obligation and compressor fuel use cost for the EGD rate zone can be found at Exhibit B, Tab 2, Schedules 4 to 6.

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<sup>2</sup>This includes both utility (regulated) and non-utility (unregulated) volumes.



Enbridge Gas Inc.  
EGD Rate Zone  
2023 Customer-Related Volumes by Rate Class (April 2023 to March 2024)  
(10<sup>3</sup>m<sup>3</sup>)

Line No.	Rate Class	Col. 1	Col. 2	Col. 3 (Col. 1 - Col. 2)
		Forecast Volumes <sup>1</sup>	EPS Participant & Other Exempt Volumes <sup>2</sup>	Net Volumes
1	1	5,177,978	1,018	5,176,959
2	6	4,880,204	105,410	4,774,793
3	9	-	-	-
4	100	27,926	-	27,926
5	110	1,072,858	397,654	675,204
6	115	385,003	372,808	12,195
7	125 <sup>3</sup>	824,971	824,971	-
8	135	55,486	-	55,486
9	145	15,721	5,893	9,828
10	170	324,007	287,942	36,065
11	200 <sup>4</sup>	187,850	187,850	-
12	300	290	-	290
Total				
13	Customer-Related	12,952,293	2,183,547	10,768,746

Notes:

- (1) Forecast Volumes after DSM from April 1, 2023 to March 31, 2024.
- (2) Estimated forecast volumes for mandatory and voluntary participants in the Emissions Performance Standards ("EPS"), volumes qualifying for exemption for non-covered activities, partial relief (80%) for greenhouse operators, hydrogen volumes and Renewable Natural Gas ("RNG") volumes. RNG volumes include the year 3 volumes outlined in the Voluntary RNG Program Application (EB-2020-0066) and have been allocated equally between the EGD and Union rate zones for forecasting purposes.
- (3) Dedicated unbundled customers.
- (4) Includes volumes delivered to downstream distributors and landfill gas.

Enbridge Gas Inc.  
EGD Rate Zone  
2023 Facility-Related Volumes  
(10<sup>3</sup>m<sup>3</sup>)

		Col. 1	Col. 2	Col.3 (Col. 1 + Col.2)
Line No.	Particulars	Utility Forecast Amount (regulated)	Non-Utility Forecast Amount (unregulated)	Total 2023 Forecast
1	Company Use - Buildings	1,341	-	1,341
2	Company Use - Boilers/Line Heaters	3,915	-	3,915
3	Company Use - NGV Fleet	820	-	820
4	Total Company Use <sup>1</sup>	6,076	-	6,076
5	Compressor Fuel <sup>2</sup>	12,346	3,953	16,298
6	Total Facility-Related	18,421	3,953	22,374

Notes:

- (1) Forecast Company-Use volumes for April 1, 2023 to March 31, 2024.  
(2) Forecast Compressor Fuel for January 1 to December 31, 2023.

Enbridge Gas Inc.  
EGD Rate Zone

Table 1  
2023 Forecast Compressor Emissions

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Line No.	Particulars	Volumes <sup>1</sup> (10 <sup>3</sup> m <sup>3</sup> )	CO <sub>2</sub> Emissions <sup>2</sup> (Tonnes CO <sub>2</sub> )	CH <sub>4</sub> Emissions <sup>3</sup> (Tonnes CH <sub>4</sub> )	N <sub>2</sub> O Emissions <sup>4</sup> (Tonnes N <sub>2</sub> O)	CO <sub>2</sub> e Emissions <sup>5</sup> (Tonnes CO <sub>2</sub> e)
1	Compressor Fuel & Transmission Ancillary Fuel	16,298	31,893	32	1	32,934

Notes:

- (1) Exhibit B, Tab 2, Schedule 3, Col. 3, Line 5.
- (2) Environment and Climate Change Canada "Canada's Greenhouse Gas Quantification Requirements - December 2021", Equation 2-9.
- (3) Col. 1 x Table 2, Col. 2, Line 1 x Table 2, Col. 2, Line 2.
- (4) Col. 1 x Table 2, Col. 3, Line 1 x Table 2, Col. 3, Line 2.
- (5) Col. 2 + (Col. 3 x Table 3, Col. 1, Line 1) + (Col. 4 x Table 3, Col. 2, Line 1).

Table 2  
Emission Factors

			Col. 1	Col. 2	Col. 3
Line No.	Particulars	Units	CO <sub>2</sub> Emission Factor	CH <sub>4</sub> Emission Factor <sup>1</sup>	N <sub>2</sub> O Emission Factor <sup>1</sup>
1	Natural Gas Pipelines	Tonne/GJ		0.00005	0.0000013
2	Heat Value <sup>2</sup>	GJ/10 <sup>3</sup> m <sup>3</sup>	38.99	38.99	38.99

Notes:

- (1) Environment and Climate Change Canada "Canada's Greenhouse Gas Quantification Requirements - December 2021", Table 2-4.
- (2) Assumed Budget Heat Value = 38.99 GJ/10<sup>3</sup>m<sup>3</sup>. In calculating actual emissions, actual heating value will be used.

Table 3  
Conversion Factors

			Col. 1	Col. 2
Line No.	Particulars	Units	Methane <sup>1</sup>	Nitrous Oxide <sup>1</sup>
1	Global Warming Potential for Carbon Dioxide Equivalent	Tonnes CO <sub>2</sub> e	25	298

Notes:

- (1) Ontario Regulation 390/18: Greenhouse Gas Emissions: Quantification, Reporting and Verification, Schedule 1.

Enbridge Gas Inc.  
EGD Rate Zone  
2023 Forecast EPS Obligation

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Line No.	2023 Forecast Compressor Emissions <sup>1</sup> (tCO <sub>2</sub> e)	2019 - 2021 EGI Average Emission Intensity (tCO <sub>2</sub> e/MWh)	2023 Forecast Production <sup>2</sup> (MWh)	Facility Specific Performance Standard <sup>3</sup> (tCO <sub>2</sub> e/MWh)	Total Annual Emissions Limit <sup>4</sup> (tCO <sub>2</sub> e)	EPS Compliance Obligation <sup>5</sup> (tCO <sub>2</sub> e)
1	32,934	0.65	50,801	0.45	22,865	10,069

Notes:

(1) Exhibit B, Tab 2, Schedule 4, Table 1, Col. 5.

(2) Col. 1 / Col. 2.

(3) MECP's GHG Emissions Performance Standards and Methodology for the Determination of the Total Annual Emissions Limit – October 2021, Formula 3.1.5-3.

(4) Col. 3 x Col. 4.

(5) Col. 1 - Col. 5.

Enbridge Gas Inc.  
EGD Rate Zone  
2023 Summary of Customer-Related and Facility-Related Costs

Line No.	Particulars	2023 Forecast
	<u>Customer-Related Cost Forecast</u>	
1	Customer-related Forecast Volume ( $10^3\text{m}^3$ ) <sup>(1)</sup>	10,768,746
2	Federal Carbon Charge (\$/m <sup>3</sup> ) <sup>(2)</sup>	0.1239
3	<b>Total Customer-Related Costs (\$)</b>	<b>1,334,247,638</b>
	<u>Facility-Related Cost Forecast</u>	
4	Company-Use Forecast Volume ( $10^3\text{m}^3$ ) <sup>(3)</sup>	6,076
5	Federal Carbon Charge (\$/m <sup>3</sup> ) <sup>(2)</sup>	0.1239
6	Company Use Costs (\$)	752,777
7	EPS Obligation (tCO <sub>2</sub> e) <sup>(4)</sup>	10,069
8	Excess Emissions Charge (\$/tCO <sub>2</sub> e) <sup>(5)</sup>	65.00
9	Compressor Fuel Use Costs (\$)	654,501
10	Compressor Fuel Use Costs - Unregulated (\$) <sup>(6)</sup>	(158,724)
11	Compressor Fuel Use Costs - Regulated (\$)	495,777
12	<b>Total Facility Related Costs (\$)</b>	<b>1,248,554</b>
13	<b>Total Cost Forecast (\$)</b>	<b>1,335,496,192</b>

Notes:

- (1) Exhibit B, Tab 2, Schedule 2. Forecast volumes from April 1, 2023 to March 31, 2024.
- (2) Exhibit A, Tab 2, Schedule 1, Table 1.
- (3) Exhibit B, Tab 2, Schedule 3, Column 1, Line 4. Forecast volumes from April 1, 2023 to March 31, 2024.
- (4) Exhibit B, Tab 2, Schedule 5. Forecast from January 1 to December 31, 2023.
- (5) Proposed Regulatory Amendments for Emissions Performance Standards Program 2023-2030.  
<https://ero.ontario.ca/notice/019-5769>
- (6) Unregulated EPS costs are allocated based on pro-rata regulated/unregulated total compressor volumes per Exhibit B, Tab 2, Schedule 3.

## FORECASTS - UNION RATE ZONES

1. The purpose of this evidence is to provide Enbridge Gas's 2023 forecast of volumes and the associated forecasted costs of complying with the GGPPA and the EPS Regulation, for the Union rate zones.
2. This tab of evidence is organized as follows:
  1. Forecast 2023 Volume and Carbon Cost
  2. Forecast 2023 Customer Volumes and Federal Carbon Charge Cost
  3. Forecast 2023 Facility Volumes and Facility Carbon Charge Cost
    - 3.1. Company Use Volumes
    - 3.2. EPS Volumes

### 1. Forecast 2023 Volume and Carbon Cost

3. The Union rate zones 2023 regulated volume forecast subject to the GGPPA and EPS Regulation is 6,769,422  $10^3\text{m}^3$ .<sup>1</sup> This results in an associated forecast 2023 total cost of \$823.91 million. The details of this volume forecast and associated cost are included at Exhibit B, Tab 3, Schedules 2 to 6. The forecast employs the same methodologies which underpinned forecasts previously approved by the OEB. Enbridge Gas has excluded unregulated non-utility storage volumes and associated costs. Non-utility costs are those associated with Enbridge Gas's unregulated non-utility storage business.

### 2. Forecast 2023 Customer Volumes and Federal Carbon Charge Cost

4. The Union rate zones total 2023 Customer Volume forecast subject to the Federal Carbon Charge is 6,598,659  $10^3\text{m}^3$  as detailed at Exhibit B, Tab 3, Schedule 2. This results in an associated forecast 2023 Federal Carbon Charge cost of \$817.57 million as detailed at Exhibit B, Tab 3, Schedule 6. Enbridge Gas has included

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<sup>1</sup> Calculated as: Exhibit B, Tab 3, Schedule 2, Col. 3, Line 16 + Exhibit B, Tab 3, Schedule 3, Col. 1, Line 6.

forecast distribution volumes subject to the Federal Carbon Charge for all rate classes within the Union rate zones as detailed at Exhibit B, Tab 3, Schedule 2. The cost estimates are subject to change and are meant to be used for informational purposes only. Customers will be charged the Federal Carbon Charge monthly based on actual billed volumes.

### 3. Forecast 2023 Facility Volumes and Facility Carbon Charge Cost

5. The Union rate zones total 2023 regulated Facility Volume forecast is 170,763  $10^3\text{m}^3$  as detailed at Exhibit B, Tab 3, Schedule 3. This results in an associated forecast 2023 Facility Carbon Charge cost of \$6.34 million as detailed at Exhibit B, Tab 3, Schedule 6. Facility Volumes are composed of: (i) Company Use Volumes including distribution buildings, boilers/line heaters, and NGV fleet volumes (which are subject to the Federal Carbon Charge under Part 1 of the GGPPA); and (ii) EPS Volumes which includes compressor fuel (which is subject to the EPS as Enbridge Gas's storage and transmission system is a "covered facility" under the EPS Regulation). The forecast 2023 regulated Facility Volume and associated forecast Facility Carbon Charge cost estimate are based on the best available information at this time and are subject to change based on actual Facility Volumes.

#### 3.1 Company Use Volumes

6. The regulated Company Use Volume forecast for 2023 including distribution buildings, boilers/line heaters and NGV fleet volumes for the Union rate zones is 13,838  $10^3\text{m}^3$  as detailed at Exhibit B, Tab 3, Schedule 3.<sup>2</sup> This results in an associated forecast 2023 Facility Carbon Charge cost of \$1.71 million as detailed at Exhibit B, Tab 3, Schedule 6.<sup>3</sup>

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<sup>2</sup> Enbridge Gas's buildings and boiler/line heater fuel volume forecast for the Union rate zones is based on a three-year average of consumption by location. For new buildings with no historical information, a volume estimate is used.

<sup>3</sup> Included in the Company Use Volume forecast for 2023 is 20  $10^3\text{m}^3$  for distribution buildings associated with non-utility unregulated storage activity. Enbridge Gas has not accounted for this amount separately as it is immaterial, resulting in costs of less than \$2,500.

### 3.2 EPS Volumes

7. The EPS Volume forecast for 2023 for the Union rate zones is 175,896 10<sup>3</sup>m<sup>3</sup> as detailed at Exhibit B, Tab 3, Schedule 3.<sup>4</sup> The corresponding forecast 2023 EPS obligation of 79,782 tCO<sub>2</sub>e results in a Facility Carbon Charge cost of \$5.19 million as detailed at Exhibit B, Tab 3, Schedules 5 and 6. Of the \$5.19 million, \$4.63 million is attributable to Enbridge Gas's regulated operations in the Union rate zones.
8. The EPS Volume forecast is derived by combining forecasts for regulated utility and unregulated non-utility compression activity into an overall physical activity forecast. Enbridge Gas has excluded unregulated non-utility compression volumes and associated costs in deriving the Facility Carbon Charge cost to be recovered in regulated rates. The EPS Volume forecast for the Union rate zones includes transmission compression, storage compression and dehydration fuel.<sup>5</sup>
9. Enbridge Gas's detailed calculations of the 2023 forecast compressor emissions, total annual emissions limit, EPS compliance obligation and compressor fuel use cost for the Union rate zones can be found at Exhibit B, Tab 3, Schedule 4 to 6.

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<sup>4</sup> This includes both utility (regulated) and non-utility (unregulated) volumes.

<sup>5</sup> The transmission and storage compression forecast is derived by combining forecasts for in-franchise and ex-franchise transmission and storage activity into an overall physical activity forecast. For dehydration fuel, average historical utilization is used to estimate the monthly forecasted usage.



Enbridge Gas Inc.  
Union Rate Zone  
2023 Customer-Related Volumes by Rate Class (April 2023 to March 2024)  
(10<sup>3</sup>m<sup>3</sup>)

Line No.	Rate Class	Col. 1	Col. 2	Col. 3 (Col. 1 - Col. 2)
		Forecast Volumes <sup>1</sup>	EPS Participant & Other Exempt Volumes <sup>2</sup>	Net Volumes
1	1	1,014,498	285	1,014,213
2	10	346,813	10,893	335,920
3	M1	3,176,382	2,462	3,173,920
4	M2	1,274,682	88,377	1,186,305
5	20	846,596	697,373	149,223
6	25	107,845	95,708	12,137
7	100	1,056,671	1,002,397	54,274
8	M4	595,504	213,327	382,177
9	M5	60,359	14,666	45,693
10	M7	759,643	621,224	138,419
11	M9 <sup>3</sup>	90,073	90,073	-
12	M10 <sup>3</sup>	153	31	122
13	T1	433,740	327,484	106,256
14	T2	4,967,496	4,967,496	-
15	T3 <sup>3</sup>	249,200	249,200	-
Total				
16	Customer-Related	14,979,654	8,380,996	6,598,659

Notes:

- (1) Forecast Volumes after DSM from April 1, 2023 to March 31, 2024.
- (2) Estimated forecast volumes for mandatory and voluntary participants in the Emissions Performance Standards ("EPS"), volumes qualifying for exemption for non-covered activities, partial relief (80%) for greenhouse operators, hydrogen volumes and Renewable Natural Gas ("RNG") volumes. RNG volumes include the year 3 volumes outlined in the Voluntary RNG Program Application (EB-2020-0066) and have been allocated equally between the EGD and Union rate zones for forecasting purposes.
- (3) Includes volumes delivered to downstream distributors and landfill gas.

Enbridge Gas Inc.  
Union Rate Zone  
2023 Facility-Related Volumes  
(10<sup>3</sup>m<sup>3</sup>)

Line No.	Particulars	Col. 1	Col. 2	Col.3 (Col. 1 + Col.2)
		Utility Forecast Amount (regulated)	Non-Utility Forecast Amount (unregulated)	Total 2023 Forecast
1	Company Use - Buildings	1,753	20	1,773
2	Company Use - Boilers/Line Heaters	12,085	-	12,085
3	Company Use - NGV Fleet	-	-	-
4	Total Company Use <sup>1</sup>	13,838	20	13,858
5	Compressor Fuel <sup>2</sup>	156,925	18,971	175,896
6	Total Facility-Related	170,763	18,990	189,754

Notes:

(1) Forecast Company-Use volumes for April 1, 2023 to March 31, 2024.

(2) Forecast Compressor Fuel for January 1 to December 31, 2023.

Enbridge Gas Inc.  
Union Rate Zone

Table 1  
2023 Forecast Compressor Emissions

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Line No.	Particulars	Volumes <sup>1</sup> (10 <sup>3</sup> m <sup>3</sup> )	CO <sub>2</sub> Emissions <sup>2</sup> (Tonnes CO <sub>2</sub> )	CH <sub>4</sub> Emissions <sup>3</sup> (Tonnes CH <sub>4</sub> )	N <sub>2</sub> O Emissions <sup>4</sup> (Tonnes N <sub>2</sub> O)	CO <sub>2</sub> e Emissions <sup>5</sup> (Tonnes CO <sub>2</sub> e)
1	Compressor Fuel & Transmission Ancillary Fuel	175,896	345,587	344	9	356,854

Notes:

- (1) Exhibit B, Tab 3, Schedule 3, Col. 3, Line 5.
- (2) Environment and Climate Change Canada "Canada's Greenhouse Gas Quantification Requirements - December 2021", Equation 2-9.
- (3) Col. 1 x Table 2, Col. 2, Line 1 x Table 2, Col. 2, Line 2.
- (4) Col. 1 x Table 2, Col. 3, Line 1 x Table 2, Col. 3, Line 2.
- (5) Col. 2 + (Col. 3 x Table 3, Col. 1, Line 1) + (Col. 4 x Table 3, Col. 2, Line 1).

Table 2  
Emission Factors

			Col. 1	Col. 2	Col. 3
Line No.	Particulars	Units	CO <sub>2</sub> Emission Factor	CH <sub>4</sub> Emission Factor <sup>1</sup>	N <sub>2</sub> O Emission Factor <sup>1</sup>
1	Natural Gas Pipelines	Tonne/GJ		0.00005	0.0000013
2	Heat Value <sup>2</sup>	GJ/10 <sup>3</sup> m <sup>3</sup>	39.12	39.12	39.12

Notes:

- (1) Environment and Climate Change Canada "Canada's Greenhouse Gas Quantification Requirements - December 2021", Table 2-4.
- (2) Assumed Budget Heat Value = 39.12 GJ/10<sup>3</sup>m<sup>3</sup>. In calculating actual emissions, actual heating value will be used.

Table 3  
Conversion Factors

			Col. 1	Col. 2
Line No.	Particulars	Units	Methane <sup>1</sup>	Nitrous Oxide <sup>1</sup>
1	Global Warming Potential for Carbon Dioxide Equivalent	Tonnes CO <sub>2</sub> e	25	298

Notes:

- (1) Ontario Regulation 390/18: Greenhouse Gas Emissions: Quantification, Reporting and Verification, Schedule 1.

Enbridge Gas Inc.  
Union Rate Zone  
2023 Forecast EPS Obligation

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
	2023 Forecast Compressor Emissions <sup>1</sup>	2019 - 2021 EGI Average Emission Intensity	2023 Forecast Production <sup>2</sup>	Facility Specific Performance Standard <sup>3</sup>	Total Annual Emissions Limit <sup>4</sup>	EPS Compliance Obligation <sup>5</sup>
Line No.	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e/MWh)	(MWh)	(tCO <sub>2</sub> e/MWh)	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)
1	356,854	0.58	615,605	0.45	277,072	79,782

Notes:

(1) Exhibit B, Tab 3, Schedule 4, Table 1, Col. 5.

(2) Col. 1 / Col. 2.

(3) MECP's GHG Emissions Performance Standards and Methodology for the Determination of the Total Annual Emissions Limit – October 2021, Formula 3.1.5-3.

(4) Col. 3 x Col. 4.

(5) Col. 1 - Col. 5.

Enbridge Gas Inc.  
Union Rate Zone  
2023 Summary of Customer-Related and Facility-Related Costs

Line No.	Particulars	2023 Forecast
	<u>Customer-Related Cost Forecast</u>	
1	Customer-related Forecast Volume ( $10^3\text{m}^3$ ) <sup>(1)</sup>	6,598,659
2	Federal Carbon Charge (\$/m <sup>3</sup> ) <sup>(2)</sup>	0.1239
3	<b>Total Customer-Related Costs (\$)</b>	<b>817,573,797</b>
	<u>Facility-Related Cost Forecast</u>	
4	Company-Use Forecast Volume ( $10^3\text{m}^3$ ) <sup>(3)</sup>	13,838
5	Federal Carbon Charge (\$/m <sup>3</sup> ) <sup>(2)</sup>	0.1239
6	Company Use Costs (\$)	1,714,561
7	EPS Obligation (tCO <sub>2</sub> e) <sup>(4)</sup>	79,782
8	Excess Emissions Charge (\$/tCO <sub>2</sub> e) <sup>(5)</sup>	65.00
9	Compressor Fuel Use Costs (\$)	5,185,862
10	Compressor Fuel Use Costs - Unregulated (\$) <sup>(6)</sup>	(559,309)
11	Compressor Fuel Use Costs - Regulated (\$)	4,626,553
12	<b>Total Facility Related Costs (\$)</b>	<b>6,341,113</b>
13	<b>Total Cost Forecast (\$)</b>	<b>823,914,911</b>

Notes:

- (1) Exhibit B, Tab 3, Schedule 2. Forecast volumes from April 1, 2023 to March 31, 2024.
- (2) Exhibit A, Tab 2, Schedule 1, Table 1.
- (3) Exhibit B, Tab 3, Schedule 3, Column 1, Line 4. Forecast volumes from April 1, 2023 to March 31, 2024.
- (4) Exhibit B, Tab 3, Schedule 5. Forecast from January 1 to December 31, 2023.
- (5) Proposed Regulatory Amendments for Emissions Performance Standards Program 2023-2030.  
<https://ero.ontario.ca/notice/019-5769>
- (6) Unregulated EPS costs are allocated based on pro-rata regulated/unregulated total compressor volumes per Exhibit B, Tab 3, Schedule 3.

## DEFERRAL AND VARIANCE ACCOUNTS

1. The purpose of this exhibit of evidence is to address deferral and variance account matters associated with Enbridge Gas's Application. As outlined in the Application, Enbridge Gas is seeking disposition of 2021 balances in FCPP-related deferral and variance accounts for each of the EGD rate zone and Union rate zones. Allocation and disposition of 2021 deferral and variance account balances is discussed in detail at Exhibit D, Tab 1, Schedule 1.
2. This exhibit of evidence is organized as follows:
  1. Established FCPP-Related Deferral and Variance Accounts
  2. 2021 FCPP-Related Deferral and Variance Account Balances
    - 2.1. 2021 Administration Costs Recorded in the Greenhouse Gas Emissions Administration Deferral Account (GGEADA)
    - 2.2. 2021 Customer-Related Costs Recorded in the Customer Carbon Charge – Variance Account (CCCVA)
    - 2.3. 2021 Facility-Related Costs Recorded in the Facility Carbon Charge – Variance Account (FCCVA)
  3. Forecast 2023 Administration Costs (for informational purposes only)

### 1. Established FCPP-Related Deferral and Variance Accounts

3. In its 2019 Application, to facilitate compliance with the GGPPA in 2019 and beyond, and ensure that the costs of compliance with the GGPPA were clearly delineated from those incurred under the Cap-and-Trade Program, Enbridge Gas requested OEB approval to establish five new deferral and variance accounts. The new accounts would record: (i) actual combined administration costs for all rate zones (effective January 1, 2019); (ii) Federal Carbon Charge cost variances between the actual costs incurred and the amount collected through rates related to the volumes delivered by Enbridge Gas for each of the EGD rate zone and Union rate zones (effective April 1, 2019); and (iii) Facility Carbon Charge cost variances between the actual costs incurred and the amount collected through rates related to Company

Use and OBPS volumes associated with Enbridge Gas's own operations for each of the EGD rate zone and the Union rate zones (effective January 1, 2019).<sup>1</sup>

4. In the OEB's Decision and Order on Enbridge Gas's 2019 Application, the OEB approved the establishment of Enbridge Gas's requested new FCPP-related deferral and variance accounts with a single exception; rather than approving a single deferral account to record the combined administration costs for all rate zones, the OEB directed that Enbridge Gas should establish two GGEADAs, one for each of the EGD rate zone and the Union rate zones.<sup>2</sup>
5. In its 2022 Application, Enbridge Gas applied to the OEB for approval to amend the wording of the FCPP-related deferral and variance accounting orders to recognize the transition from the federal Output Based Pricing System ("OBPS") to the provincial Emissions Performance Standards ("EPS").<sup>3</sup> To reflect this change, Enbridge Gas requested to update the applicable account definitions to include reference to both federal and provincial regulations and update the applicable account names to remove the word "Federal", effective January 1, 2022. The OEB approved the amendments to the wording of the FCPP deferral and variance accounting orders as filed in its Decision and Order on Enbridge Gas's 2022 Application.<sup>4</sup>
6. Accordingly, Enbridge Gas's established FCPP-related deferral and variance accounts are:

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<sup>1</sup> EB-2018-0205, EGI 2019 FCPP Application, October 10, 2018, Exhibit D, Tab 1, Schedule 1, pp. 2-4.

<sup>2</sup> EB-2018-0205, OEB Decision and Order, July 4, 2019, pp. 9-10.

<sup>3</sup> EB-2021-0209, EGI 2022 FCPP Application, September 29, 2021, Exhibit C, p. 3.

<sup>4</sup> EB-2021-0209, OEB Decision and Order, February 10, 2022, p.10.

1. GGEADA – EGD Rate Zone;<sup>5</sup>
2. GGEADA – Union Rate Zones;<sup>6</sup>
3. CCCVA – EGD Rate Zone;<sup>7</sup>
4. CCCVA – Union Rate Zones;<sup>8</sup>
5. FCCVA – EGD Rate Zone;<sup>9</sup> and
6. FCCVA – Union Rate Zones.<sup>10</sup>

### 3. 2021 FCPP-Related Deferral and Variance Account Balances

7. Enbridge Gas is seeking to dispose of: 2021 administration costs of \$3.79 million in the GGEADAs and 2021 facility-related costs of \$(1.05) million in the FCCVAs. The 2021 CCCVAs have a zero balance.

#### 3.1 2021 Administration Costs Recorded in the GGEADA

8. As set out in Table 1, Enbridge Gas's 2021 administration costs are \$3.79 million. A description of variances to Enbridge Gas's forecast 2021 administration costs follows:

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<sup>5</sup> EGD Rate Zone Account No. 179-501, to record the administration costs associated with the impacts of federal and provincial regulations related to greenhouse gas emission requirements for Enbridge Gas within the EGD rate zone effective January 1, 2019.

<sup>6</sup> Union Rate Zones Account No. 179-422, to record the administration costs associated with the impacts of federal and provincial regulations related to greenhouse gas emission requirements for Enbridge Gas within the Union rate zones effective January 1, 2019.

<sup>7</sup> EGD Rate Zone Account No. 179-502, to record the variances between actual customer carbon costs and customer carbon costs recovered in rates for distribution volumes delivered by Enbridge Gas within the EGD rate zone effective April 1, 2019. Except for exempted customers as explained in Exhibit A.

<sup>8</sup> Union Rate Zones Account No. 179-421, to record the variances between actual customer carbon costs and customer carbon costs recovered in rates for distribution volumes delivered by Enbridge Gas within the Union rate zones effective April 1, 2019. Except for exempted customers as explained in Exhibit A.

<sup>9</sup> EGD Rate Zone Account No. 179-503, to record the variance between actual facility carbon costs and facility carbon costs recovered in rates within the EGD rate zone effective January 1, 2019.

<sup>10</sup> Union Rate Zones Account No. 179-420, to record the variance between actual facility carbon costs and facility carbon costs recovered in rates within the Union rate zones effective January 1, 2019.



Table 1  
2021 Administration Costs (\$millions)

Cost Element	2021 Forecasted Costs <sup>11</sup>	2021 Actual Costs <sup>12</sup>			Variance
		EGD Rate Zone	Union Rate Zones	Total	
IT Billing System	0.22	0.12	0.10	0.22	0.00
Staffing Resources	1.10	0.58	0.35	0.93	(0.17)
Consulting and External Legal Support	0.30	0.32	0.19	0.51	0.21
GHG Reporting and Verification	0.05	0.03	0.02	0.04	(0.01)
Bad Debt	2.74	1.46	0.49	1.95	(0.79)
Other Miscellaneous Costs	0.16	0.01	0.00	0.01	(0.15)
Interest <sup>13</sup>	N/A	0.08	0.04	0.12	0.12
Total	4.57	2.59	1.20	3.79	(0.78)

9. Shared administration costs set out in Table 1, including costs related to: staffing resources, consulting and external legal support, GHG reporting and verification and other miscellaneous costs, have been allocated to the EGD rate zone and Union rate zones in proportion to actual customers' consumption volumes subject to the Federal Carbon Charge from January 1, 2021 to December 31, 2021.<sup>14</sup> Unique administration costs set out in Table 1 that are attributable to a particular rate zone, including costs related to IT billing systems and bad debt, have been allocated to that respective rate zone accordingly. Each of the cost categories set out in Table 1 is further discussed below.

<sup>11</sup> EB-2020-0212, EGI 2021 FCPP Application, September 30, 2020, Exhibit C, p.4 and an update to the forecast 2021 bad debt through EGI's 2022 FCPP Application at EB-2021-0209, EGI 2022 Application, Interrogatory Responses, Exhibit I.EP.3, Table 2.

<sup>12</sup> Composed of actual 2021 costs from January to December 2021.

<sup>13</sup> Enbridge Gas did not include a 2021 forecast cost for interest.

<sup>14</sup> Approximately 62% of customer consumption volumes were attributable to the EGD rate zone and 38% of customer consumption volumes were attributable to the Union rate zones.

### ***IT Billing System Costs***

10. In its 2021 Application, Enbridge Gas forecast costs of \$0.22 million related to the IT billing systems. This included \$0.16 million (\$0.12 million for the EGD rate zone and \$0.04 million for the Union rate zones) revenue requirement associated with Cap and Trade-related billing system functionality re-purposed for GGPPA-related charges and \$0.06 million revenue requirement associated with the additional billing system modification required in 2020 for the Union rate zones to comply with the GGPPA.<sup>15</sup>

11. The actual IT billing system costs for 2021 were \$0.22 million; \$0.16 million related to the revenue requirement associated with re-purposing the Cap and Trade-related billing system to collect GGPPA-related charges and the revenue requirement of \$0.06 million associated with the additional billing system modifications required for the Union rate zones.

### ***Staffing Resources***

12. In its 2021 Application, Enbridge Gas forecast costs of \$1.10 million for salaries and wages in 2021, which included fully allocated costs for the five full time equivalents FTEs) that comprised the Carbon Strategy team at that time, plus one additional FTE.<sup>16</sup>

13. Actual salaries and wages costs incurred in 2021 were \$0.93 million. Staffing and wages costs were lower than forecast due to the Carbon Strategy team averaging 4.8 FTEs throughout 2021, less than the six FTEs forecast. The number of FTE's increased from 4.5 to 5.5 in June 2021 reflecting the resource requirements to facilitate compliance with the GGPPA, evaluate and procure eligible compliance units under the OBPS and the incremental effort required for regulations related to GHG emissions requirements including the federal Offset Regulation and protocols, and the Clean Fuel Regulation, as well as supporting the Company in understanding

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<sup>15</sup> EB-2020-0212, EGI 2021 FCPP Application, September 30, 2020, Exhibit C, pp. 4-5.

<sup>16</sup> Ibid, p. 5.

and responding to new federal and provincial regulations related to GHG emission reductions.

### ***Consulting and External Legal Support***

14. In its 2021 Application, Enbridge Gas forecast consulting and external legal support costs of \$0.30 million for 2021.<sup>17</sup> Actual consulting and external legal support costs incurred in 2021 were \$0.51 million. Consulting and external legal support costs were higher than budgeted due to:

- a. Additional external legal support required throughout 2021 to assist with the OEB proceeding regarding the Applicability of Charges to Indigenous Customers, which relates to Enbridge Gas's 2020 Application.
- b. Increased consulting and external legal support required in 2021 to procure eligible Credits and Recognized Units as discussed in Exhibit A, Tab 2, Schedule 1. These costs were higher than anticipated because it was the first time Enbridge Gas procured Credits and Recognized Units. Work completed in 2021 can be leveraged in future years.
- c. Enbridge Gas engaged external consultants to understand the impacts of known and potential future federal and provincial regulations related to greenhouse gas emission reductions.

### ***GHG Reporting and Verification***

15. In its 2021 Application, Enbridge Gas forecast costs of \$0.05 million for GHG reporting and verification of its 2020 OBPS emissions, completed in 2021.<sup>18</sup> Actual GHG reporting and verification costs incurred in 2021 were \$0.04 million, all of which was related to the verification of its 2020 OBPS report by a third-party auditor as required under the OBPS Regulations.

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<sup>17</sup>EB-2020-0212, EGI 2021 FCPP Application, September 30, 2020, Exhibit C, p. 6.

<sup>18</sup>Ibid, p. 6.

### ***Bad Debt***

16. In its 2022 FCPP Application, Enbridge Gas updated its 2021 bad debt forecasts as there was an update to the forecasting methodology.<sup>19</sup> The bad debt cost forecasts were updated to \$2.74 million for 2021.<sup>20</sup> Actual bad debt costs incurred in 2021 were \$1.95 million.

17. As outlined in EB-2021-0209, Exhibit I.VECC.7, the bad debt forecasting methodology distinguishes FCPP-related bad debt from “regular” bad debt by taking a percentage of the total Company bad debt based on the percentage of the total bill related to FCPP. The contributing factor to the forecast variance is attributable to the difference in forecast versus actual values used for each component required to calculate the 2021 percentage of the total bill related to FCPP. The actual FCPP charges billed were less than what was forecast while the actual total company revenue increased from what was forecast. This resulted in a decrease to the 2021 percentage of the total bill related to FCPP and therefore a decrease to the total 2021 Federal Carbon bad debt from what was forecast.

18. Consistent with the OEB’s Decision and Order on Enbridge Gas’s 2020 Application<sup>21</sup>, the \$1.95 million is exclusive of COVID-19 impacts.

### ***Other Miscellaneous Costs***

19. In its 2021 Application, Enbridge Gas forecast 2021 other miscellaneous costs of \$0.16 million associated with customer outreach and communications, training, conferences, travel expenses, memberships and subscriptions associated with the GGPPA or other federal GHG or carbon pricing programs.<sup>22</sup> Actual other miscellaneous costs incurred in 2021 were \$0.01 million. Due to the COVID-19 emergency, costs related to activities such as travel and conferences were limited, therefore reducing actual miscellaneous costs. Enbridge Gas also leveraged existing

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<sup>19</sup> EB-2021-0209, EGI 2022 Application, Interrogatory Responses, Exhibit I.VECC.7.

<sup>20</sup> EB-2021-0209, EGI 2022 Application, Interrogatory Responses, Exhibit I.VECC.7, p. 2.

<sup>21</sup> EB-2019-0247, OEB Decision and Order, August 13, 2020, p.11.

<sup>22</sup> EB-2020-0212, EGI 2021 FCPP Application, September 30, 2020, Exhibit C, p. 7.

customer communication pathways, such as QRAM bill inserts, mass emails, webpages, and social media to communicate to customers regarding the FCPP, thus reducing actual 2021 costs related to customer communications.

### 3.2 2021 Customer-Related Costs Recorded in the CCCVA

20. Enbridge Gas tracks the difference between the Federal Carbon Charge amount collected through rates and the actual costs incurred in the CCCVA for each of the EGD rate zone and the Union rate zones. Since Enbridge Gas remits the Federal Carbon Charge to the CRA based on actual billed volumes and the Federal Carbon Charge rate, consistent with the GGPPA, was being collected through rates, there is no CCCVA balance for either the EGD or Union rate zones. Enbridge Gas's customer-related obligation for January 1, 2021 to December 21, 2021 was \$1,089.39 million.

### 3.3 2021 Facility-Related Costs Recorded in the FCCVA

21. As set out in Exhibit A, Tab 2, Schedule 1, Enbridge Gas's facility-related volumes and associated costs are composed of Company Use Volumes (facilities which are not covered under the OBPS) and OBPS Volumes from January 1, 2021 to December 31, 2021. Enbridge Gas's 2021 facility-related obligation was \$4.52 million (\$0.95 million related to Company Use Volumes and \$3.57 million related to OBPS Volumes), of which \$4.09 million is attributable to Enbridge Gas's regulated utility operations.

22. Enbridge Gas has recorded a 2021 facility-related variance of \$(1.05) million in the FCCVAs, including \$(0.25) million for the EGD rate zone and \$(0.80) million for the Union rate zones.<sup>23</sup> This reflects a variance between the actual and forecast facility-

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<sup>23</sup> This variance reflects consideration of: (i) applying the Federal Carbon Charge Rate for Marketable Natural Gas of 5.87 ¢/m<sup>3</sup> from January 1, 2021 – March 31, 2021 and 7.83 ¢/m<sup>3</sup> from April 1, 2021 to December 31, 2021 set out in Exhibit A, Tab 2, Schedule 1, Table 1 to actual Company Use Volumes of natural gas consumed in the operation of Enbridge Gas's facilities from January 1, 2021 to December 31, 2021; (ii) Enbridge Gas's 2021 OBPS obligation of \$3.14 million related to regulated utility operations for the January 1, 2021 to December 31, 2021 period; (iii) actual billed amounts for the January 1, 2021 to December 31, 2021 period; and (iv) interest of approximately \$(0.09) million.

related costs, and a variance in the amount of revenue billed through the Facility Carbon Charge, due to a difference in Customer Volumes realized. Table 2 below shows the variance related to the difference between 2021 forecast regulated facility-related volumes, as filed in Enbridge Gas's 2021 Application, and actual regulated facility-related volumes for 2021.

Table 2<sup>24</sup>  
2021 Regulated Facility-Related Volumes/Emissions and Costs

	2021 Forecasted Volumes & Emissions	2021 Forecasted Costs (\$millions)	2021 Actual Volumes & Emissions	2021 Actual Costs (\$millions)	Variance (\$millions)
Company Use	25,117 10 <sup>3</sup> m <sup>3</sup>	1.97	13,847 10 <sup>3</sup> m <sup>3</sup>	0.95	(1.02)
OBPS	99,030 tCO <sub>2</sub> e	3.96	80,806 tCO <sub>2</sub> e	3.14	(0.82)
Total	-	5.93	-	4.09	(1.84)

#### 4. Forecast 2023 Administration Costs

23. As set out in Table 3, Enbridge Gas's forecast 2023 administration costs are \$7.20 million: \$4.43 million for the EGD rate zone and \$2.77 million for the Union rate zones. Enbridge Gas will record actual 2023 costs in the GGEADAs until such time that these costs are incorporated into rates. Enbridge Gas is providing forecast 2023 administration costs for informational purposes only and will seek recovery of its actual 2023 administration costs in a future proceeding.

<sup>24</sup> Only volumes/emissions and associated costs related to regulated utility operations are included.

Table 3  
Forecast 2023 Administration Costs

Cost Element	2023 Forecast Costs (\$millions)		
	EGD Rate Zone	Union Rate Zones	Total
IT Billing System	0.00	0.05	0.05
Staffing Resources	0.90	0.55	1.45
Consulting & External Legal Support	0.21	0.13	0.34
GHG Reporting & Verification	0.03	0.02	0.05
Bad Debt	3.20	1.96	5.16
Other Miscellaneous Costs	0.09	0.05	0.14
Total	4.43	2.77	7.20

24. Shared administration costs set out in Table 3, including costs related to: staffing resources, consulting and external legal support, GHG reporting and verification and other miscellaneous costs, have been allocated to the EGD rate zone and Union rate zones in proportion to forecast customer consumption volumes subject to the Federal Carbon Charge from January 1, 2023 to December 31, 2023.<sup>25</sup> Unique administration costs set out in Table 3 that are directly attributable to a particular rate zone, including costs related to: IT billing systems and bad debt, have been allocated to that respective rate zone accordingly. Enbridge Gas's current OEB-approved 2022 rates and proposed 2023 rates for the EGD rate zone and Union rate zones do not include any FCPP-related administration costs as these costs are considered to be incremental to Enbridge Gas's traditional operations as a regulated natural gas utility in Ontario. A description of the components of Enbridge Gas's forecast 2023 administration costs follows.

### ***IT Billing System Costs***

25. The revenue requirement in 2023 for the IT billing system is \$0.05 million. The revenue requirement is associated with the additional billing system modifications required in 2020 for the Union rate zones. The 2023 revenue requirement for these costs has not been previously collected from customers.

<sup>25</sup> Approximately 62% of forecast customer consumption volumes are attributable to the EGD rate zone and 38% of forecast customer consumption volumes are attributable to the Union rate zones.

26. Under the GGPPA, RNG is considered exempt from the Federal Carbon Charge and in August 2022 the Federal Government released a draft amendment to the GGPPA proposing to exempt the portion of hydrogen that is blended with natural gas.<sup>26</sup> In order to comply with the GGPPA, additional IT billing system modifications may be required to exempt RNG and hydrogen from the Federal Carbon Charge on customers' bills. Any additional IT billing system costs incurred will be recorded in the GGEADAs and Enbridge Gas will seek OEB approval to recover these costs in a future proceeding.

### ***Staffing Resources***

27. For 2023, staffing costs are currently estimated to be approximately \$1.45 million.

These fully allocated costs are for the 6.5 FTEs that comprise the Carbon Strategy team in 2022 plus one additional FTE. This level of staffing reflects the incremental level of effort Enbridge Gas has experienced to date and expects to continue in order to facilitate compliance with the GGPPA and EPS Regulation in 2023, including the incremental effort to evaluate and procure EPU's, as well as to support the Company in understanding and responding to new federal and provincial regulations related to GHG emission reductions. With the establishment of other carbon emission-related programs and initiatives in the future, Enbridge Gas may require incremental staffing resources. Enbridge Gas will seek OEB approval to recover actual 2023 staffing costs required to facilitate compliance with the GGPPA, EPS Regulation and other GHG or carbon pricing regulations, together with its overall 2023 administration costs, in a future proceeding.

28. The GGPPA and EPS Regulation impacts a wide variety of groups across the organization and wherever reasonable to do so Enbridge Gas has leveraged existing resources outside of the Carbon Strategy team and will continue to do so going

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<sup>26</sup> In August 2022, the federal government released a draft amendment to the GGPPA, proposing to exempt hydrogen from the Federal Carbon Charge in proportion to the amount of hydrogen blended with natural gas. <https://fin.canada.ca/drleg-apl/2022/ita-lir-0822-d.pdf>



forward. This approach is consistent with Enbridge Gas's commitment to cost-effectiveness, productivity gains and continuous improvement. These ancillary resources and related costs will not be recorded in the GGEADA in 2023.

### ***Consulting and External Legal Support***

29. Enbridge Gas anticipates that it will incur \$0.34 million in consulting and external legal costs in 2023 for work supporting the development and sustainment of Enbridge Gas's carbon strategy and related analyses, the review and interpretation of any new or updated regulations associated with the GGPPA, EPS Regulation, or other GHG or carbon pricing programs, the procurement of EPU's, and the development of Enbridge Gas's Application and associated OEB proceedings.
30. These expenditures are required to ensure that Enbridge Gas remains well-informed of, and in compliance with, current and new regulatory requirements. Enbridge Gas also notes that it may incur additional consulting and external legal costs associated with other GHG or carbon policies. These costs will also be recorded in the GGEADA.

### ***GHG Reporting and Verification***

31. In accordance with the EPS Regulation, Enbridge Gas is required to have its annual EPS report verified by a third-party auditor. The verification includes the GHG emissions, the production and the total annual emissions limit.<sup>27</sup> As per the GHG Reporting Regulation, the emission report must be submitted June 1 of the year following each compliance period and the verification report must be submitted by September 1 of the year following each compliance period.<sup>28</sup> For the 2022 EPS compliance period, the emission report will be submitted by June 1, 2023 and the verification will be completed and submitted by September 1, 2023. Enbridge Gas

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<sup>27</sup> Emissions Performance Standards Regulation (O. Reg. 241/19)  
<https://www.ontario.ca/laws/regulation/190241>

<sup>28</sup> Greenhouse Gas Emissions: Quantification, Reporting and Verification (O. Reg. 390/18).  
<https://www.ontario.ca/laws/regulation/180390#BK24>

anticipates the fees associated with the 2022 emissions reporting and verification to be \$0.05 million.

### ***Bad Debt***

32. Enbridge Gas estimates that it will incur approximately \$5.16 million in incremental bad debt expenses in 2023 based on forecasted costs recoverable from customers as a result of the GGPPA and EPS Regulation, as set out in Exhibit B, Tab 1, Schedule 1. While Enbridge Gas has included total 2023 forecast bad debt costs in Table 3, only actual bad debt related to the GGPPA and EPS Regulation will be recorded in the GGEADAs for each rate zone.
33. Ongoing COVID-19 related conditions may impact bad debt related to the GGPPA and EPS Regulation beyond what Enbridge Gas would typically forecast. The Company notes however that since the pandemic started in 2020, it is important to recognize that bad debt is going up for reasons that go beyond the COVID-19 impacts; for example, the annual increase in the Federal Carbon Charge rate in proportion to the total bill, and the year-over-year increase in total bad debt as a function of historic arrear balances, bankruptcy, unemployment, inflation and general economic forecasts. Enbridge Gas will continue to evaluate the COVID-19 impacts on an actual basis and will assess its ability to segregate the COVID-19 impacts from regular bad debt when finalizing applicable deferral and variance account balances.

### ***Other Miscellaneous Costs***

34. Enbridge Gas expects to incur approximately \$0.14 million in other miscellaneous costs for customer outreach and communications, training, conferences, travel expenses, memberships and subscriptions associated with the GGPPA, EPS Regulation or other GHG or carbon pricing programs in 2023.

## COST RECOVERY

1. The purpose of this exhibit is to support Enbridge Gas's request to update the impacts of the GGPPA and EPS Regulation in rates for the EGD and Union rate zones, effective April 1, 2023 and to address the proposed allocation and disposition of Enbridge Gas's 2021 FCPP-related deferral and variance account balances, as described at Exhibit C, Tab 1, Schedule 1. Accordingly, Enbridge Gas requests approval of: (i) the proposed rate changes on a final basis, effective April 1, 2023; (ii) the proposed rate change reflecting a common Facility Carbon Charge for all customers, effective January 1, 2024; and (iii) the allocation and disposition of the 2021 FCPP-related deferral and variance account balances to be disposed of in the first available QRAM following an OEB decision as early as April 1, 2023.
2. This exhibit of evidence is organized as follows:
  1. 2023 FCPP-Related Unit Rates
    - 1.1 2023 Federal Carbon Charge
    - 1.2 2023 Facility Carbon Charge
    - 1.3 2023 Administration Costs
    - 1.4 Bill Impacts of Carbon Charges
  2. 2021 Deferral and Variance Account Balances
    - 2.1 2021 CCCVA
    - 2.2 2021 FCCVA
    - 2.3 2021 GGEADA
    - 2.4 Proposed Disposition of Deferral and Variance Account Balances
    - 2.5 Bill Impacts of Deferral and Variance Account Disposition

Supporting schedules and appendices:

- Exhibit D, Tab 2, Schedules 1 to 5: Cost Recovery - EGD Rate Zone
- Exhibit D, Tab 3, Schedules 1 to 5: Cost Recovery - Union Rate Zones

### 1. 2023 FCPP-Related Unit Rates

3. Under the GGPPA, Enbridge Gas is required to remit payment of the Federal Carbon Charge to the Government of Canada for volumes delivered to its customers and for Company Use Volumes. Enbridge Gas is also required to remit payment for any excess emissions related to EPS volumes. These costs will be recovered from customers through the Federal Carbon Charge and Facility Carbon Charge unit rates, respectively.
4. The Federal Carbon Charge and Facility Carbon Charge unit rates are summarized at Exhibit D, Tab 2, Schedule 1, page 3 for the EGD rate zone and at Exhibit D, Tab 3, Schedule 1, page 3 for the Union rate zones. A summary of the Federal Carbon Charge and Facility Carbon Charge unit rates by rate class for the EGD rate zone is provided at Exhibit D, Tab 2, Schedule 1, pages 4 to 5.

#### 1.1 2023 Federal Carbon Charge

5. Effective April 1, 2023, Enbridge Gas proposes to increase the Federal Carbon Charge from 9.7900 ¢/m<sup>3</sup> (or \$50/tCO<sub>2</sub>e) to 12.3900 ¢/m<sup>3</sup> (or \$65/tCO<sub>2</sub>e), as outlined in the GGPPA and set out at Exhibit A, Tab 2, Schedule 1, Table 1.<sup>1</sup>
6. The Federal Carbon Charge is applicable to distribution customers in all rate zones. Entities that are exempt under Part 1 of the GGPPA will not be charged the Federal Carbon Charge. Further, Enbridge Gas will apply 20% of the Federal Carbon Charge to distribution volumes for eligible commercial greenhouse customers, resulting in 80% greenhouse relief. The Federal Carbon Charge is shown as a separate line item on customers' bills, where applicable.

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<sup>1</sup> For 2019 to 2022 refer to the GGPPA, Schedule 2 and Schedule 4, <https://laws-lois.justice.gc.ca/PDF/G-11.55.pdf> and for 2023 to 2030 refer to Fuel Charge Rates for Listed Provinces and Territories for 2023 to 2030, <https://www.canada.ca/en/departement-finance/news/2021/12/fuel-charge-rates-for-listed-provinces-and-territories-for-2023-to-2030.html>

7. Enbridge Gas will track the difference between the Federal Carbon Charge amount collected through rates and the actual costs incurred in the CCCVA for each of the EGD rate zone and the Union rate zones.
8. The Federal Carbon Charge customer-related forecast volumes and costs by rate class for the April 1, 2023 to March 31, 2024 period is set out at Exhibit D, Tab 2, Schedule 1, page 1 for the EGD rate zone and at Exhibit D, Tab 3, Schedule 1, page 1 for the Union rate zones.

#### 1.2 2023 Facility Carbon Charge

9. Enbridge Gas incurs costs of compliance with the GGPPA and EPS Regulation that are associated with its own operations. Enbridge Gas's Facility Carbon Charge costs are incurred in relation to both Company Use Volumes (generated from distribution buildings, boilers/line heaters and NGV fleet volumes) and EPS Volumes (generated from compressor fuel volumes). The estimated Facility Carbon Charge costs for the April 1, 2023 to March 31, 2024 time period are \$1.249 million for the EGD rate zone and \$6.341 million for the Union rate zones, as detailed at Exhibit B, Tab 2, Schedule 1 and at Exhibit B, Tab 3, Schedule 1 respectively.
10. Enbridge Gas recovers Facility Carbon Charge costs from rate classes based on in-franchise delivery volumes and ex-franchise transportation volumes. All customers in each rate class are responsible for the Facility Carbon Charge costs, regardless of whether the customer is exempt from the Federal Carbon Charge. Enbridge Gas adds the Facility Carbon Charge to the current approved delivery or transportation charges on customers' bills.
11. Effective April 1, 2023, Enbridge Gas is proposing to increase the Facility Carbon Charge from  $0.0070 \text{ ¢/m}^3$  to  $0.0079 \text{ ¢/m}^3$  for the EGD rate zone and from  $0.0141 \text{ ¢/m}^3$  to  $0.01620 \text{ ¢/m}^3$  for the Union rate zones. When expressed in \$/GJ, the Facility Carbon Charge remains unchanged for the EGD and Union rate zones at \$0.002/GJ

and \$0.004/GJ, respectively. The derivation of the proposed 2023 Facility Carbon Charge for each rate zone is set out in Table 1.

12. Effective January 1, 2024, Enbridge Gas is proposing a common Facility Carbon Charge of 0.0157 ¢/m<sup>3</sup> for all customers to be implemented with the January 1, 2024 QRAM. Enbridge Gas will rebase rates for the first time as an amalgamated utility beginning January 1, 2024. As part of the rebasing of rates, charges between the EGD and Union rate zones for contracts that existed prior to amalgamation will end. Through the rate zone charges, Union rate zone facility carbon charges allocated to ex-franchise rate classes are, in part, recovered from EGD rate zone customers. A common unit rate ensures all customers pay the same Facility Carbon Charge based on consumption. This approach is supported by the OEB's EB-2016-0296/EB-2016-0300 Decision regarding the allocation and recovery of facility-related obligation costs of a single entity where the OEB stated:

The OEB confirms that as customer-related obligation costs and facility-related obligations costs are driven by gas consumption, they should be allocated based on consumption and recovered through a volumetric charge.<sup>2</sup>

13. The proposal for a common Facility Carbon Charge is also consistent with the approach to allocation and recovery of facility-related obligation costs for Union where a common unit rate is charged to all in-franchise and ex-franchise customers.

14. The common Facility Carbon Charge is derived by dividing the sum of Enbridge Gas's total facility-related costs by the total forecast volumes of the amalgamated utility.<sup>3</sup> The derivation of the proposed Facility Carbon Charge for each period is set out in Table 1.

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<sup>2</sup> EB-2016-0296/EB-2016-0300, Applications for approval of 2017 Cap and Trade Compliance Plan cost consequences, Decision and Order, page 39. The approach was subsequently extended to FCPP facility costs.

<sup>3</sup> The forecast volumes of the amalgamated utility are derived as the sum of the EGD and Union rate zone volumes excluding EGD rate zone volumes included in the Union rate zone ex-franchise forecast.

Table 1  
Derivation of 2023 Facility Carbon Charge

Line No.	Particulars	Effective Apr. 1, 2023 <u>Rate Zone</u>		Effective Jan. 1, 2024
		EGD (a)	Union (b)	All Customers (c) = (a+b)
1	Total Facility Carbon Cost (\$000's)	1,249 <sup>1</sup>	6,341 <sup>2</sup>	7,590
2	2023 Forecast Volumes (10 <sup>3</sup> m <sup>3</sup> )	15,770,825 <sup>3</sup>	39,028,232 <sup>4</sup>	48,473,382 <sup>5</sup>
3	Facility Carbon Charge (cents / m <sup>3</sup> ) (line 1 / line 2 * 100)	0.0079	0.0162	0.0157
4	Facility Carbon Charge (\$/GJ) (line 3 / Heat Value * 10) <sup>x</sup>	0.002 <sup>6</sup>	0.004 <sup>7</sup>	0.004 <sup>7</sup>

Notes:

- (1) Exhibit B, Tab 2, Schedule 6.
- (2) Exhibit B, Tab 3, Schedule 6.
- (3) Exhibit D, Tab 2, Schedule 1.
- (4) Exhibit D, Tab 3, Schedule 1.
- (5) Column (a) plus column (b) less EGD rate zone volumes included in Union rate zone ex-franchise forecast.
- (6) Conversion to GJs based on heat value adjustment of 38.99 GJ/10<sup>3</sup>m<sup>3</sup>.
- (7) Conversion to GJs based on heat value adjustment of 39.12 GJ/10<sup>3</sup>m<sup>3</sup>.

15. For 2023, Enbridge Gas will track the difference between the amount collected through rates and the actual costs incurred in the FCCVA for each of the EGD and the Union rate zones.

16. Facility Carbon Charge forecast volumes by component, costs and unit rate for 2023 are detailed at Exhibit D, Tab 2, Schedule 1, page 2 for the EGD rate zone and at Exhibit D, Tab 3, Schedule 1, page 2 for the Union rate zones.

### 1.3 2023 Administration Costs

17. Administration costs incurred in 2023 will be recorded in the OEB-approved GGEADAs and disposed of in a future proceeding, as described at Exhibit A, Tab 2, Schedule 1 and Exhibit C, Tab 1, Schedule 1.

### 1.4 Bill Impacts of Carbon Charges

18. For the EGD rate zone, the bill impact of the 2023 carbon charges for a typical residential customer with annual consumption of 2,400 m<sup>3</sup> is an increase of \$62.42 per year. Exhibit D, Tab 2, Schedule 2 details customer bill impacts for the EGD rate zone relative to October 1, 2022 QRAM rates (EB-2022-0219). The bill impact of the proposed common Facility Carbon Charge effective January 1, 2024 is an increase of \$0.19 per year in addition to the increase proposed for April 1, 2023.
19. For the Union rate zones, the bill impact of the 2023 carbon charges for a typical residential customer with annual consumption of 2,200 m<sup>3</sup> is an increase of \$57.24 per year. Exhibit D, Tab 3, Schedule 2 details customer bill impacts for the Union rate zones relative to October 1, 2022 QRAM rates (EB-2022-0219). The bill impact of the proposed common Facility Carbon Charge effective January 1, 2024 is a decrease of \$0.01 per year in addition to the increased proposed for April 1, 2023.

## 2. 2021 Deferral and Variance Account Balances

20. Enbridge Gas is requesting approval of the allocation and disposition of the 2021 final balances in its GGEADA and FCCVA for each of the EGD and Union rate zones. There is no CCCVA balance for either the EGD or Union rate zones. A description of 2021 FCPP-related deferral and variance account balances is provided at Exhibit C, Tab 1, Schedule 1. The deferral and variance account balances are provided at Exhibit D, Tab 2, Schedule 3 for the EGD rate zone and at Exhibit D, Tab 3, Schedule 3 for the Union rate zones.



### 2.1 2021 CCCVA

21. There is no CCCVA balance for the EGD or Union rate zones.

### 2.2 2021 FCCVA

22. Enbridge Gas proposes to allocate FCCVA balances to rate classes in proportion to actual in-franchise distribution and ex-franchise transportation volumes from January 1, 2021 to December 31, 2021. Unit rates for disposition are derived using actual volumes for the January 1, 2021 to December 31, 2021 time period. The methodology to derive the allocation and disposition unit rates is the same for the EGD and Union rate zones.

### 2.3 2021 GGEADA

23. Enbridge Gas proposes to allocate GGEADA balances to rate classes in proportion to the number of customers for the EGD rate zone and 2013 OEB-approved administrative and general expenses for the Union rate zones. The proposed allocation methodologies for each rate zone are consistent with the allocations approved in the disposition of Enbridge Gas's 2020 FCPP-related deferral and variance account balances (EB-2021-0209). Unit rates for disposition are derived using actual volumes for the January 1, 2021 to December 31, 2021 time period. The methodology to derive the disposition unit rates is the same for the EGD and Union rate zones.

### 2.4 Proposed Disposition of Deferral and Variance Account Balances

24. Enbridge Gas proposes to dispose of the balances with a one-time billing adjustment recovered in one month for all customers in the EGD and the Union rate zones.

25. Enbridge Gas proposes to dispose of the approved 2021 FCPP-related deferral and variance account balances with the first QRAM application following the OEB's approval, as early as April 1, 2023. Unit rates for disposition can be found at

Exhibit D, Tab 2, Schedule 4 for the EGD rate zone and at Exhibit D, Tab 3, Schedule 4 for the Union rate zones.

2.5 Bill Impacts of Deferral and Variance Account Disposition

26. For the EGD rate zone, the bill impact of the proposed deferral and variance account balance disposition for a typical residential customer with annual consumption of 2,400 m<sup>3</sup> is \$1.17. Exhibit D, Tab 2, Schedule 5 details the customer bill impacts for the EGD rate zone.
27. For the Union rate zones, the bill impact of the proposed deferral and variance account balance disposition for a typical residential customer with annual consumption of 2,200 m<sup>3</sup> is \$0.42 for customers in the Union South rate zone and \$0.53 for customers in the Union North rate zone. Exhibit D, Tab 3, Schedule 5 details customer bill impacts for the Union rate zones.

ENBRIDGE GAS INC.

EGD Rate Zone

TABLE 1: 2023 CUSTOMER-RELATED VOLUMES AND DERIVATION OF FEDERAL CARBON CHARGE UNIT RATE

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Line	Rate	Forecast Volumes <sup>1</sup>	Less: Transportation Volumes	Customer-Related Forecast Volumes <sup>2</sup>	EPS Participant & Other Exempt Volumes <sup>3</sup>	Net Volumes <sup>4</sup>	Federal Carbon Charge <sup>5</sup>	Federal Carbon Cost <sup>6</sup>	Federal Carbon Charge Unit Rate <sup>7</sup>
		(10 <sup>3</sup> m <sup>3</sup> )	(10 <sup>3</sup> m <sup>3</sup> )	(10 <sup>3</sup> m <sup>3</sup> )	(10 <sup>3</sup> m <sup>3</sup> )	(10 <sup>3</sup> m <sup>3</sup> )	(\$/m <sup>3</sup> )	(\$)	(¢/m <sup>3</sup> )
1.1	1	5,177,978	0	5,177,978	1,018	5,176,959	0.1239	641,425,281	
1.2	6	4,880,204	0	4,880,204	105,410	4,774,793	0.1239	591,596,877	
1.3	9	0	0	0	0	0	0.1239	0	
1.4	100	27,926	0	27,926	0	27,926	0.1239	3,460,010	
1.5	110	1,072,858	0	1,072,858	397,654	675,204	0.1239	83,657,765	
1.6	115	385,003	0	385,003	372,808	12,195	0.1239	1,510,980	
1.7a	125	824,971	0	824,971	824,971	0	0.1239	0	
1.8	135	55,486	0	55,486	0	55,486	0.1239	6,874,669	
1.9	145	15,721	0	15,721	5,893	9,828	0.1239	1,217,663	
1.10	170	324,007	0	324,007	287,942	36,065	0.1239	4,468,421	
1.11	200	187,850	0	187,850	187,850	0	0.1239	0	
1.12	300	290	0	290	0	290	0.1239	35,972	
1.13	332	2,818,533	2,818,533	0	0	0	0.1239	0	
1	Total	15,770,825	2,818,533	12,952,293	2,183,547	10,768,746		1,334,247,638	12.3900

Notes:

(1) Exhibit B, Tab 2, Schedule 2, Col. 1 + Rate 332 forecast volume.

(2) Col. 1 - Col. 2.

(3) Exhibit B, Tab 2, Schedule 2, Col. 2.

(4) Col. 3 - Col. 4.

(5) Exhibit B, Tab 2, Schedule 6, Line 2.

(6) Col. 5 x Col. 6 x 1000.

(7) (Col. 7 / (Col. 5 x 1000)) x 100.

ENBRIDGE GAS INC.  
EGD Rate Zone

TABLE 2: 2023 FACILITY-RELATED VOLUMES AND DERIVATION OF FACILITY CARBON CHARGE UNIT RATE

		Col. 1	Col. 2	Col. 3	Col. 4
Line		Utility Forecast Volume (Regulated) <sup>1</sup> (10 <sup>3</sup> m <sup>3</sup> )	Carbon Charge <sup>2</sup> (\$/m <sup>3</sup> )	Facility Carbon Cost (\$)	Facility Carbon Charge Unit Rate (¢/m <sup>3</sup> )
	Company Use				
2.1.1	Buildings	1,341			
2.1.2	Boilers/Line Heaters	3,915			
2.1.3	NGV Fleet	820			
2.1	Total Company Use	6,076	0.1239	752,777	<sup>3</sup>
2.2	Compressor Fuel	12,346	-	495,777	<sup>4</sup>
2	Total	18,421		1,248,554	0.0079 <sup>5</sup>

Notes:

(1) Exhibit B, Tab 2, Schedule 3, Col. 1.

The Company Use forecast volumes for April 1, 2023 to March 31, 2024 and the Compressor Fuel forecast volume for January 1, 2023 to December 31, 2023.

(2) Exhibit B, Tab 2, Schedule 6, Line 5.

(3) Col. 1 x Col. 2 x 1000.

(4) Exhibit B, Tab 2, Schedule 6, Line 11.

(5) Facility Carbon Cost / Total forecast volume = [Line 2, Col. 3 / (Table 1, Line 1, Col. 1 x 1000)] x 100.

ENBRIDGE GAS INC.  
EGD Rate Zone  
TABLE 3: 2023 CARBON CHARGE UNIT RATE SUMMARY

		Col. 1	
Line		Unit Rate	
		(¢/m <sup>3</sup> )	
1	Federal Carbon Charge	12.3900	1
2	Facility Carbon Charge	0.0079	2
3	Total	12.3979	3

Notes:

(1) Table 1, Line 1, Col. 8.

(2) Table 2, Line 2, Col. 4.

(3) Line 1 + Line 2.

ENBRIDGE GAS INC.

EGD Rate Zone

TABLE 4: 2023 CARBON CHARGE UNIT RATE BY RATE CLASS

Rate Class		(¢/m <sup>3</sup> )
Rate 1	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 6	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 9	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 100	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 110	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 115	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 125	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 135	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 145	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079

Rate Class		(¢/m <sup>3</sup> )
Rate 170	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 200	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0079
Rate 300	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 300 Interruptible	Federal Carbon Charge (If Applicable)	12.3900
	Facility Carbon Charge	0.0079
Rate 315	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0079
Rate 316	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0079
Rate 320	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0000
Rate 325	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0079
Rate 330	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0079
Rate 331	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0079
Rate 332	Federal Carbon Charge (If Applicable)	0.0000
	Facility Carbon Charge	0.0079

## EGD RATE ZONE

**ANNUAL BILL COMPARISON - RESIDENTIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
<u>No.</u>										
			Heating & Water Htg.				Heating, Water Htg. & Other Uses			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
1.1	VOLUME	m³	3,064	3,064	0	0.0%	4,691	4,691	0	0.0%
1.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%	265.44	265.44	0.00	0.0%
1.3	DISTRIBUTION CHG.	\$	280.89	280.86	0.03	0.0%	423.52	423.48	0.04	0.0%
1.4	LOAD BALANCING	\$ \$	237.44	237.44	0.00	0.0%	363.52	363.52	0.00	0.0%
1.5	SALES COMMDTY	\$	847.43	847.43	0.00	0.0%	1,297.41	1,297.41	0.00	0.0%
1.6	FEDERAL CARBON CHARGE	\$	379.63	299.97	79.66	26.6%	581.21	459.25	121.97	26.6%
1.7	TOTAL SALES	\$	2,010.82	1,931.13	79.69	4.1%	2,931.11	2,809.10	122.01	4.3%
1.8	TOTAL T-SERVICE	\$	1,163.39	1,083.70	79.69	7.4%	1,633.69	1,511.68	122.01	8.1%

		Heating Only					Heating & Water Htg.				
			(A)	(B)	CHANGE			(A)	(B)	CHANGE	
					(A) - (B)	%				(A) - (B)	%
2.1	VOLUME	m³	1,955	1,955	0	0.0%		2,005	2,005	0	0.0%
2.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%		265.44	265.44	0.00	0.0%
2.3	DISTRIBUTION CHG.	\$	180.15	180.13	0.02	0.0%		187.44	187.42	0.02	0.0%
2.4	LOAD BALANCING	§ \$	151.50	151.50	0.00	0.0%		155.37	155.37	0.00	0.0%
2.5	SALES COMMDTY	\$	540.70	540.70	0.00	0.0%		554.53	554.53	0.00	0.0%
2.6	FEDERAL CARBON CHARGE	\$	242.22	191.39	50.83	26.6%		248.42	196.29	52.13	26.6%
2.7	TOTAL SALES	\$	1,380.02	1,329.17	50.85	3.8%		1,411.21	1,359.06	52.15	3.8%
2.8	TOTAL T-SERVICE	\$	839.31	788.46	50.85	6.4%		856.67	804.52	52.15	6.5%

§ The Load Balancing Charge shown here includes transportation charges



**EGD RATE ZONE****ANNUAL BILL COMPARISON - RESIDENTIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32****(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8	
Heating, Pool Htg. & Other Uses							General & Water Htg.					
			(A)	(B)	CHANGE					(A)	(B)	CHANGE
					(A) - (B)	%				(A) - (B)	%	
3.1	VOLUME	m³	5,048	5,048	0	0.0%		1,081	1,081	0	0.0%	
3.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%		265.44	265.44	0.00	0.0%	
3.3	DISTRIBUTION CHG.		455.47	455.43	0.05	0.0%		105.77	105.76	0.01	0.0%	
3.4	LOAD BALANCING	\$	391.18	391.18	0.00	0.0%		83.77	83.77	0.00	0.0%	
3.5	SALES COMMDTY	\$	1,396.15	1,396.15	0.00	0.0%		298.98	298.98	0.00	0.0%	
3.6	FEDERAL CARBON CHARGE	\$	625.45	494.20	131.25	26.6%		133.94	105.83	28.11	26.6%	
3.7	TOTAL SALES	\$	3,133.69	3,002.40	131.29	4.4%		887.89	859.77	28.12	3.3%	
3.8	TOTAL T-SERVICE	\$	1,737.54	1,606.25	131.29	8.2%		588.91	560.80	28.12	5.0%	
Heating & Water Htg.							Heating & Water Htg.					
			(A)	(B)	CHANGE					(A)	(B)	CHANGE
					(A) - (B)	%				(A) - (B)	%	
4.1	VOLUME	m³	2,480	2,480	0	0.0%		2,400	2,400	0	0.0%	
4.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%		265.44	265.44	0.00	0.0%	
4.3	DISTRIBUTION CHG.	\$	229.33	229.31	0.02	0.0%		221.99	221.97	0.02	0.0%	
4.4	LOAD BALANCING	\$	192.18	192.18	0.00	0.0%		185.98	185.98	0.00	0.0%	
4.5	SALES COMMDTY	\$	685.91	685.91	0.00	0.0%		663.78	663.78	0.00	0.0%	
4.6	FEDERAL CARBON CHARGE	\$	307.27	242.79	64.48	26.6%		297.36	234.96	62.40	26.6%	
4.7	TOTAL SALES	\$	1,680.13	1,615.63	64.50	4.0%		1,634.55	1,572.13	62.42	4.0%	
4.8	TOTAL T-SERVICE	\$	994.23	929.72	64.50	6.9%		970.77	908.35	62.42	6.9%	

§ The Load Balancing Charge shown here includes transportation charges

EGD RATE ZONE

**ANNUAL BILL COMPARISON - COMMERCIAL & INDUSTRIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32**

(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing

Item No.			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	
Commercial Heating & Other Uses							Com. Htg., Air Cond'ng & Other Uses				
			(A)	(B)	CHANGE						
					(A) - (B)	%				(A) - (B)	%
1.1	VOLUME	m³	22,606	22,606	0	0.0%	29,278	29,278	0	0.0%	
1.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%	898.92	898.92	0.00	0.0%	
1.3	DISTRIBUTION CHG.	\$	1,744.51	1,744.31	0.20	0.0%	2,238.21	2,237.95	0.26	0.0%	
1.4	LOAD BALANCING	§ \$	1,707.33	1,707.33	0.00	0.0%	2,211.24	2,211.24	0.00	0.0%	
1.5	SALES COMMDTY	\$	6,257.34	6,257.34	0.00	0.0%	8,104.15	8,104.15	0.00	0.0%	
1.6	FEDERAL CARBON CHARGE	\$	2,800.88	2,213.13	587.76	26.6%	3,627.54	2,866.32	761.23	26.6%	
1.7	TOTAL SALES	\$	13,408.99	12,821.03	587.96	4.6%	17,080.07	16,318.58	761.49	4.7%	
1.8	TOTAL T-SERVICE	\$	7,151.65	6,563.69	587.96	9.0%	8,975.92	8,214.42	761.49	9.3%	
Medium Commercial Customer							Large Commercial Customer				
			(A)	(B)	CHANGE						
					(A) - (B)	%				(A) - (B)	%
2.1	VOLUME	m³	169,563	169,563	0	0.0%	339,125	339,125	0	0.0%	
2.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%	898.92	898.92	0.00	0.0%	
2.3	DISTRIBUTION CHG.	\$	9,377.72	9,376.20	1.53	0.0%	17,159.83	17,156.77	3.05	0.0%	
2.4	LOAD BALANCING	§ \$	12,806.36	12,806.36	0.00	0.0%	25,612.65	25,612.65	0.00	0.0%	
2.5	SALES COMMDTY	\$	46,935.06	46,935.06	0.00	0.0%	93,869.84	93,869.84	0.00	0.0%	
2.6	FEDERAL CARBON CHARGE	\$	21,008.86	16,600.22	4,408.64	26.6%	42,017.59	33,200.34	8,817.25	26.6%	
2.7	TOTAL SALES	\$	91,026.92	86,616.76	4,410.16	5.1%	179,558.82	170,738.52	8,820.30	5.2%	
2.8	TOTAL T-SERVICE	\$	44,091.86	39,681.70	4,410.16	11.1%	85,688.98	76,868.68	8,820.30	11.5%	

§ The Load Balancing Charge shown here includes transportation charges

**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - COMMERCIAL & INDUSTRIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
Industrial General Use							Industrial Heating & Other Uses						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
3.1	VOLUME	m³	43,285	43,285	0	0.0%		63,903	63,903	0	0.0%		
3.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%		898.92	898.92	0.00	0.0%		
3.3	DISTRIBUTION CHG.	\$	3,091.63	3,091.24	0.39	0.0%		4,144.43	4,143.86	0.58	0.0%		
3.4	LOAD BALANCING	§	3,269.13	3,269.13	0.00	0.0%		4,826.32	4,826.32	0.00	0.0%		
3.5	SALES COMMDTY	\$	11,981.29	11,981.29	0.00	0.0%		17,688.36	17,688.36	0.00	0.0%		
3.6	FEDERAL CARBON CHARGE	\$	5,363.01	4,237.60	1,125.41	26.6%		7,917.58	6,256.10	1,661.48	26.6%		
3.7	TOTAL SALES	\$	24,603.99	23,478.19	1,125.80	4.8%		35,475.61	33,813.56	1,662.05	4.9%		
3.8	TOTAL T-SERVICE	\$	12,622.69	11,496.89	1,125.80	9.8%		17,787.25	16,125.20	1,662.05	10.3%		
Medium Industrial Customer							Large Industrial Customer						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
4.1	VOLUME	m³	169,563	169,563	0	0.0%		339,124	339,124	0	0.0%		
4.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%		898.92	898.92	0.00	0.0%		
4.3	DISTRIBUTION CHG.	\$	9,604.69	9,603.16	1.53	0.0%		17,328.70	17,325.64	3.05	0.0%		
4.4	LOAD BALANCING	§	12,806.36	12,806.36	0.00	0.0%		25,612.57	25,612.57	0.00	0.0%		
4.5	SALES COMMDTY	\$	46,935.06	46,935.06	0.00	0.0%		93,869.57	93,869.57	0.00	0.0%		
4.6	FEDERAL CARBON CHARGE	\$	21,008.86	16,600.22	4,408.64	26.6%		42,017.46	33,200.24	8,817.22	26.6%		
4.7	TOTAL SALES	\$	91,253.89	86,843.72	4,410.16	5.1%		179,727.22	170,906.94	8,820.28	5.2%		
4.8	TOTAL T-SERVICE	\$	44,318.83	39,908.66	4,410.16	11.1%		85,857.65	77,037.37	8,820.28	11.4%		

§ The Load Balancing Charge shown here includes transportation charges

**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Rate 100 - Small Commercial Firm							Rate 100 - Average Commercial Firm			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
1.1	VOLUME	m³	339,188	339,188	0	0.0%	598,567	598,567	0	0.0%
1.2	CUSTOMER CHG.	\$	1,557.96	1,557.96	0.00	0.0%	1,557.96	1,557.96	0.00	0.0%
1.3	DISTRIBUTION CHG.	\$	14,449.38	14,446.33	3.05	0.0%	70,099.13	70,093.74	5.39	0.0%
1.4	LOAD BALANCING	\$	25,617.40	25,617.40	0.00	0.0%	45,207.18	45,207.18	0.00	0.0%
1.5	SALES COMMDTY	\$	93,887.28	93,887.28	0.00	0.0%	165,683.42	165,683.42	0.00	0.0%
1.6	FEDERAL CARBON CHARGE	\$	42,025.39	33,206.51	8,818.89	26.6%	74,162.45	58,599.71	15,562.74	26.6%
1.7	TOTAL SALES	\$	177,537.42	168,715.48	8,821.94	5.2%	356,710.14	341,142.01	15,568.13	4.6%
1.8	TOTAL T-SERVICE	\$	83,650.14	74,828.20	8,821.94	11.8%	191,026.72	175,458.59	15,568.13	8.9%

**Rate 100 - Large Industrial Firm**

			(A)	(B)	CHANGE	
					(A) - (B)	%
2.1	VOLUME	m³	1,500,000	1,500,000	0	0.0%
2.2	CUSTOMER CHG.	\$	1,557.96	1,557.96	0.00	0.0%
2.3	DISTRIBUTION CHG.	\$	140,835.36	140,821.86	13.50	0.0%
2.4	LOAD BALANCING	\$	113,288.52	113,288.52	0.00	0.0%
2.5	SALES COMMDTY	\$	415,200.19	415,200.19	0.00	0.0%
2.6	FEDERAL CARBON CHARGE	\$	185,850.00	146,850.00	39,000.00	26.6%
2.7	TOTAL SALES	\$	856,732.03	817,718.53	39,013.50	4.8%
2.8	TOTAL T-SERVICE	\$	441,531.84	402,518.34	39,013.50	9.7%

**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Rate 145 - Small Commercial Interr.							Rate 145 - Average Commercial Interr.			
			(A)	(B)	CHANGE					
					(A) - (B)	%				
3.1	VOLUME	m³	339,188	339,188	0	0.0%	598,568	598,568	0	0.0%
3.2	CUSTOMER CHG.	\$	1,574.88	1,574.88	0.00	0.0%	1,574.88	1,574.88	0.00	0.0%
3.3	DISTRIBUTION CHG.	\$	22,670.48	22,667.43	3.05	0.0%	36,871.49	36,866.11	5.39	0.0%
3.4	LOAD BALANCING	\$	19,524.53	19,524.53	0.00	0.0%	34,455.62	34,455.62	0.00	0.0%
3.5	SALES COMMDTY	\$	93,699.26	93,699.26	0.00	0.0%	165,351.89	165,351.89	0.00	0.0%
3.6	FEDERAL CARBON CHARGE	\$	42,025.39	33,206.51	8,818.89	26.6%	74,162.58	58,599.81	15,562.77	26.6%
3.7	TOTAL SALES	\$	179,494.54	170,672.60	8,821.94	5.2%	312,416.47	296,848.31	15,568.16	5.2%
3.8	TOTAL T-SERVICE	\$	85,795.28	76,973.34	8,821.94	11.5%	147,064.57	131,496.42	15,568.16	11.8%
Rate 145 - Small Industrial Interr.							Rate 145 - Average Industrial Interr.			
			(A)	(B)	CHANGE					
					(A) - (B)	%				
4.1	VOLUME	m³	339,188	339,188	0	0.0%	598,567	598,567	0	0.0%
4.2	CUSTOMER CHG.	\$	1,574.88	1,574.88	0.00	0.0%	1,574.88	1,574.88	0.00	0.0%
4.3	DISTRIBUTION CHG.	\$	22,946.36	22,943.31	3.05	0.0%	37,115.69	37,110.30	5.39	0.0%
4.4	LOAD BALANCING	\$	19,524.53	19,524.53	0.00	0.0%	34,455.56	34,455.56	0.00	0.0%
4.5	SALES COMMDTY	\$	93,699.26	93,699.26	0.00	0.0%	165,351.62	165,351.62	0.00	0.0%
4.6	FEDERAL CARBON CHARGE	\$	42,025.39	33,206.51	8,818.89	26.6%	74,162.45	58,599.71	15,562.74	26.6%
4.7	TOTAL SALES	\$	179,770.42	170,948.48	8,821.94	5.2%	312,660.20	297,092.07	15,568.13	5.2%
4.8	TOTAL T-SERVICE	\$	86,071.16	77,249.22	8,821.94	11.4%	147,308.58	131,740.46	15,568.13	11.8%

**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
Rate 110 - Small Ind. Firm - 50% LF							Rate 110 - Average Ind. Firm - 50% LF						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
5.1	VOLUME	m³	598,568	598,568	0	0.0%		9,976,121	9,976,121	0	0.0%		
5.2	CUSTOMER CHG.	\$	7,454.64	7,454.64	0.00	0.0%		7,454.64	7,454.64	0.00	0.0%		
5.3	DISTRIBUTION CHG.	\$	16,556.58	16,551.19	5.39	0.0%		271,896.57	271,806.79	89.79	0.0%		
5.4	LOAD BALANCING	\$	34,169.82	34,169.82	0.00	0.0%		569,496.26	569,496.26	0.00	0.0%		
5.5	SALES COMMDTY	\$	165,329.13	165,329.13	0.00	0.0%		2,755,482.11	2,755,482.11	0.00	0.0%		
5.6	FEDERAL CARBON CHARGE	\$	74,162.58	58,599.81	15,562.77	26.6%		1,236,041.39	976,662.25	259,379.15	26.6%		
5.7	TOTAL SALES	\$	297,672.74	282,104.59	15,568.16	5.5%		4,840,370.97	4,580,902.04	259,468.93	5.7%		
5.8	TOTAL T-SERVICE	\$	132,343.61	116,775.46	15,568.16	13.3%		2,084,888.86	1,825,419.93	259,468.93	14.2%		
Rate 110 - Average Ind. Firm - 75% LF							Rate 115 - Large Ind. Firm - 80% LF						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
6.1	VOLUME	m³	9,976,120	9,976,120	0	0.0%		69,832,850	69,832,850	0	0.0%		
6.2	CUSTOMER CHG.	\$	7,454.64	7,454.64	0.00	0.0%		7,901.28	7,901.28	0.00	0.0%		
6.3	DISTRIBUTION CHG.	\$	221,637.98	221,548.20	89.79	0.0%		1,262,732.15	1,262,103.66	628.50	0.0%		
6.4	LOAD BALANCING	\$	569,496.20	569,496.20	0.00	0.0%		3,754,339.81	3,754,339.81	0.00	0.0%		
6.5	SALES COMMDTY	\$	2,755,481.83	2,755,481.83	0.00	0.0%		19,288,375.58	19,288,375.58	0.00	0.0%		
6.6	FEDERAL CARBON CHARGE	\$	1,236,041.27	976,662.15	259,379.12	26.6%		8,652,290.12	6,836,636.02	1,815,654.10	26.6%		
6.7	TOTAL SALES	\$	4,790,111.92	4,530,643.02	259,468.91	5.7%		32,965,638.93	31,149,356.34	1,816,282.60	5.8%		
6.8	TOTAL T-SERVICE	\$	2,034,630.09	1,775,161.19	259,468.91	14.6%		13,677,263.35	11,860,980.76	1,816,282.60	15.3%		

## EGD RATE ZONE

**ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS****INCLUDING FEDERAL CARBON PRICING IMPACTS FOR NON-EPS PARTICIPANTS AND RIDER K BILL 32****(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
Rate 135 - Seasonal Firm							Rate 170 - Average Ind. Interr. - 50% LF						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
7.1	VOLUME	m³	598,567	598,567	0	0.0%		9,976,121	9,976,121	0	0.0%		
7.2	CUSTOMER CHG.	\$	1,470.24	1,470.24	0.00	0.0%		3,551.16	3,551.16	0.00	0.0%		
7.3	DISTRIBUTION CHG.	\$	13,366.17	13,360.78	5.39	0.0%		119,573.54	119,483.75	89.79	0.1%		
7.4	LOAD BALANCING	\$	26,127.81	26,127.81	0.00	0.0%		447,544.65	447,544.65	0.00	0.0%		
7.5	SALES COMMDTY	\$	165,373.11	165,373.11	0.00	0.0%		2,755,482.09	2,755,482.09	0.00	0.0%		
7.6	FEDERAL CARBON CHARGE	\$	74,162.45	58,599.71	15,562.74	26.6%		1,236,041.39	976,662.25	259,379.15	26.6%		
7.7	TOTAL SALES	\$	280,499.78	264,931.65	15,568.13	5.9%		4,562,192.83	4,302,723.90	259,468.93	6.0%		
7.8	TOTAL T-SERVICE	\$	115,126.67	99,558.54	15,568.13	15.6%		1,806,710.74	1,547,241.81	259,468.93	16.8%		
Rate 170 - Average Ind. Interr. - 75% LF							Rate 170 - Large Ind. Interr. - 75% LF						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
8.1	VOLUME	m³	9,976,120	9,976,120	0	0.0%		69,832,850	69,832,850	0	0.0%		
8.2	CUSTOMER CHG.	\$	3,551.16	3,551.16	0.00	0.0%		3,551.16	3,551.16	0.00	0.0%		
8.3	DISTRIBUTION CHG.	\$	111,892.14	111,802.35	89.79	0.1%		665,577.45	664,948.95	628.50	0.1%		
8.4	LOAD BALANCING	\$	447,544.60	447,544.60	0.00	0.0%		3,132,812.67	3,132,812.67	0.00	0.0%		
8.5	SALES COMMDTY	\$	2,755,481.82	2,755,481.82	0.00	0.0%		19,288,375.47	19,288,375.47	0.00	0.0%		
8.6	FEDERAL CARBON CHARGE	\$	1,236,041.27	976,662.15	259,379.12	26.6%		8,652,290.12	6,836,636.02	1,815,654.10	26.6%		
8.7	TOTAL SALES	\$	4,554,510.98	4,295,042.08	259,468.91	6.0%		31,742,606.87	29,926,324.27	1,816,282.60	6.1%		
8.8	TOTAL T-SERVICE	\$	1,799,029.17	1,539,560.26	259,468.91	16.9%		12,454,231.39	10,637,948.80	1,816,282.60	17.1%		

## EGD RATE ZONE

**ANNUAL BILL COMPARISON - RESIDENTIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
<u>No.</u>										
Heating & Water Htg.							Heating, Water Htg. & Other Uses			
			(A)	(B)	CHANGE					CHANGE
					(A) - (B)	%	(A)	(B)	(A) - (B)	%
1.1	VOLUME	m³	3,064	3,064	0	0.0%	4,691	4,691	0	0.0%
1.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%	265.44	265.44	0.00	0.0%
1.3	DISTRIBUTION CHG.	\$	280.89	280.86	0.03	0.0%	423.52	423.48	0.04	0.0%
1.4	LOAD BALANCING	\$ \$	237.44	237.44	0.00	0.0%	363.52	363.52	0.00	0.0%
1.5	SALES COMMDTY	\$	847.43	847.43	0.00	0.0%	1,297.41	1,297.41	0.00	0.0%
1.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
1.7	TOTAL SALES	\$	1,631.19	1,631.16	0.03	0.0%	2,349.89	2,349.85	0.04	0.0%
1.8	TOTAL T-SERVICE	\$	783.76	783.74	0.03	0.0%	1,052.48	1,052.43	0.04	0.0%

		Heating Only				Heating & Water Htg.				
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
2.1	VOLUME	m³	1,955	1,955	0	0.0%	2,005	2,005	0	0.0%
2.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%	265.44	265.44	0.00	0.0%
2.3	DISTRIBUTION CHG.	\$	180.15	180.13	0.02	0.0%	187.44	187.42	0.02	0.0%
2.4	LOAD BALANCING	§ \$	151.50	151.50	0.00	0.0%	155.37	155.37	0.00	0.0%
2.5	SALES COMMDTY	\$	540.70	540.70	0.00	0.0%	554.53	554.53	0.00	0.0%
2.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
2.7	TOTAL SALES	\$	1,137.79	1,137.77	0.02	0.0%	1,162.79	1,162.77	0.02	0.0%
2.8	TOTAL T-SERVICE	\$	597.09	597.07	0.02	0.0%	608.25	608.23	0.02	0.0%

§ The Load Balancing Charge shown here includes transportation charges



**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - RESIDENTIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
Heating, Pool Htg. & Other Uses							General & Water Htg.						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
3.1	VOLUME	m³	5,048	5,048	0	0.0%		1,081	1,081	0	0.0%		
3.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%		265.44	265.44	0.00	0.0%		
3.3	DISTRIBUTION CHG.	\$	455.47	455.43	0.05	0.0%		105.77	105.76	0.01	0.0%		
3.4	LOAD BALANCING	§ \$	391.18	391.18	0.00	0.0%		83.77	83.77	0.00	0.0%		
3.5	SALES COMMDTY	\$	1,396.15	1,396.15	0.00	0.0%		298.98	298.98	0.00	0.0%		
3.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%		
3.7	TOTAL SALES	\$	2,508.25	2,508.20	0.05	0.0%		753.95	753.94	0.01	0.0%		
3.8	TOTAL T-SERVICE	\$	1,112.09	1,112.05	0.05	0.0%		454.98	454.97	0.01	0.0%		
Heating & Water Htg.							Heating & Water Htg.						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
4.1	VOLUME	m³	2,480	2,480	0	0.0%		2,400	2,400	0	0.0%		
4.2	CUSTOMER CHG.	\$	265.44	265.44	0.00	0.0%		265.44	265.44	0.00	0.0%		
4.3	DISTRIBUTION CHG.	\$	229.33	229.31	0.02	0.0%		221.99	221.97	0.02	0.0%		
4.4	LOAD BALANCING	§ \$	192.18	192.18	0.00	0.0%		185.98	185.98	0.00	0.0%		
4.5	SALES COMMDTY	\$	685.91	685.91	0.00	0.0%		663.78	663.78	0.00	0.0%		
4.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%		
4.7	TOTAL SALES	\$	1,372.86	1,372.84	0.02	0.0%		1,337.19	1,337.17	0.02	0.0%		
4.8	TOTAL T-SERVICE	\$	686.95	686.93	0.02	0.0%		673.41	673.39	0.02	0.0%		

§ The Load Balancing Charge shown here includes transportation charges

**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - COMMERCIAL & INDUSTRIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing

Item No.			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Commercial Heating & Other Uses							Com. Htg., Air Cond'ng & Other Uses			
			(A)	(B)	CHANGE					
					(A) - (B)	%				
1.1	VOLUME	m³	22,606	22,606	0	0.0%	29,278	29,278	0	0.0%
1.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%	898.92	898.92	0.00	0.0%
1.3	DISTRIBUTION CHG.	\$	1,744.51	1,744.31	0.20	0.0%	2,238.21	2,237.95	0.26	0.0%
1.4	LOAD BALANCING	\$	1,707.33	1,707.33	0.00	0.0%	2,211.24	2,211.24	0.00	0.0%
1.5	SALES COMMDTY	\$	6,257.34	6,257.34	0.00	0.0%	8,104.15	8,104.15	0.00	0.0%
1.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
1.7	TOTAL SALES	\$	10,608.11	10,607.91	0.20	0.0%	13,452.53	13,452.26	0.26	0.0%
1.8	TOTAL T-SERVICE	\$	4,350.77	4,350.56	0.20	0.0%	5,348.37	5,348.11	0.26	0.0%
Medium Commercial Customer							Large Commercial Customer			
			(A)	(B)	CHANGE					
					(A) - (B)	%				
2.1	VOLUME	m³	169,563	169,563	0	0.0%	339,125	339,125	0	0.0%
2.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%	898.92	898.92	0.00	0.0%
2.3	DISTRIBUTION CHG.	\$	9,377.72	9,376.20	1.53	0.0%	17,159.83	17,156.77	3.05	0.0%
2.4	LOAD BALANCING	\$	12,806.36	12,806.36	0.00	0.0%	25,612.65	25,612.65	0.00	0.0%
2.5	SALES COMMDTY	\$	46,935.06	46,935.06	0.00	0.0%	93,869.84	93,869.84	0.00	0.0%
2.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
2.7	TOTAL SALES	\$	70,018.07	70,016.54	1.53	0.0%	137,541.23	137,538.18	3.05	0.0%
2.8	TOTAL T-SERVICE	\$	23,083.01	23,081.48	1.53	0.0%	43,671.39	43,668.34	3.05	0.0%

§ The Load Balancing Charge shown here includes transportation charges

**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - COMMERCIAL & INDUSTRIAL CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
Industrial General Use							Industrial Heating & Other Uses						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
3.1	VOLUME	m³	43,285	43,285	0	0.0%		63,903	63,903	0	0.0%		
3.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%		898.92	898.92	0.00	0.0%		
3.3	DISTRIBUTION CHG.	\$	3,091.63	3,091.24	0.39	0.0%		4,144.43	4,143.86	0.58	0.0%		
3.4	LOAD BALANCING	§ \$	3,269.13	3,269.13	0.00	0.0%		4,826.32	4,826.32	0.00	0.0%		
3.5	SALES COMMDTY	\$	11,981.29	11,981.29	0.00	0.0%		17,688.36	17,688.36	0.00	0.0%		
3.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%		
3.7	TOTAL SALES	\$	19,240.98	19,240.59	0.39	0.0%		27,558.03	27,557.45	0.58	0.0%		
3.8	TOTAL T-SERVICE	\$	7,259.68	7,259.29	0.39	0.0%		9,869.67	9,869.10	0.58	0.0%		
Medium Industrial Customer							Large Industrial Customer						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
4.1	VOLUME	m³	169,563	169,563	0	0.0%		339,124	339,124	0	0.0%		
4.2	CUSTOMER CHG.	\$	898.92	898.92	0.00	0.0%		898.92	898.92	0.00	0.0%		
4.3	DISTRIBUTION CHG.	\$	9,604.69	9,603.16	1.53	0.0%		17,328.70	17,325.64	3.05	0.0%		
4.4	LOAD BALANCING	§	12,806.36	12,806.36	0.00	0.0%		25,612.57	25,612.57	0.00	0.0%		
4.5	SALES COMMDTY	\$	46,935.06	46,935.06	0.00	0.0%		93,869.57	93,869.57	0.00	0.0%		
4.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%		
4.7	TOTAL SALES	\$	70,245.03	70,243.50	1.53	0.0%		137,709.75	137,706.70	3.05	0.0%		
4.8	TOTAL T-SERVICE	\$	23,309.97	23,308.44	1.53	0.0%		43,840.19	43,837.14	3.05	0.0%		

§ The Load Balancing Charge shown here includes transportation charges

# EGD RATE ZONE

## **ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS** **INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing

Item			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
No.										
Rate 100 - Small Commercial Firm							Rate 100 - Average Commercial Firm			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
1.1	VOLUME	m³	339,188	339,188	0	0.0%	598,567	598,567	0	0.0%
1.2	CUSTOMER CHG.	\$	1,557.96	1,557.96	0.00	0.0%	1,557.96	1,557.96	0.00	0.0%
1.3	DISTRIBUTION CHG.	\$	14,449.38	14,446.33	3.05	0.0%	70,099.13	70,093.74	5.39	0.0%
1.4	LOAD BALANCING	\$	25,617.40	25,617.40	0.00	0.0%	45,207.18	45,207.18	0.00	0.0%
1.5	SALES COMMDTY	\$	93,887.28	93,887.28	0.00	0.0%	165,683.42	165,683.42	0.00	0.0%
1.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
1.7	TOTAL SALES	\$	135,512.03	135,508.98	3.05	0.0%	282,547.69	282,542.30	5.39	0.0%
1.8	TOTAL T-SERVICE	\$	41,624.75	41,621.70	3.05	0.0%	116,864.26	116,858.88	5.39	0.0%

Rate 100 - Large Industrial Firm						
			(A)	(B)	CHANGE	
					(A) - (B)	%
2.1	VOLUME	m³	1,500,000	1,500,000	0	0.0%
2.2	CUSTOMER CHG.	\$	1,557.96	1,557.96	0.00	0.0%
2.3	DISTRIBUTION CHG.	\$	140,835.36	140,821.86	13.50	0.0%
2.4	LOAD BALANCING	\$	113,288.52	113,288.52	0.00	0.0%
2.5	SALES COMMDTY	\$	415,200.19	415,200.19	0.00	0.0%
2.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%
2.7	TOTAL SALES	\$	670,882.03	670,868.53	13.50	0.0%
2.8	TOTAL T-SERVICE	\$	255,681.84	255,668.34	13.50	0.0%

EGD RATE ZONE

**ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing

Item No.			Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
Rate 145 - Small Commercial Interr.							Rate 145 - Average Commercial Interr.			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
3.1	VOLUME	m³	339,188	339,188	0	0.0%	598,568	598,568	0	0.0%
3.2	CUSTOMER CHG.	\$	1,574.88	1,574.88	0.00	0.0%	1,574.88	1,574.88	0.00	0.0%
3.3	DISTRIBUTION CHG.	\$	22,670.48	22,667.43	3.05	0.0%	36,871.49	36,866.11	5.39	0.0%
3.4	LOAD BALANCING	\$	19,524.53	19,524.53	0.00	0.0%	34,455.62	34,455.62	0.00	0.0%
3.5	SALES COMMDTY	\$	93,699.26	93,699.26	0.00	0.0%	165,351.89	165,351.89	0.00	0.0%
3.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
3.7	TOTAL SALES	\$	137,469.15	137,466.09	3.05	0.0%	238,253.89	238,248.51	5.39	0.0%
3.8	TOTAL T-SERVICE	\$	43,769.89	43,766.83	3.05	0.0%	72,902.00	72,896.61	5.39	0.0%
Rate 145 - Small Industrial Interr.							Rate 145 - Average Industrial Interr.			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
4.1	VOLUME	m³	339,188	339,188	0	0.0%	598,567	598,567	0	0.0%
4.2	CUSTOMER CHG.	\$	1,574.88	1,574.88	0.00	0.0%	1,574.88	1,574.88	0.00	0.0%
4.3	DISTRIBUTION CHG.	\$	22,946.36	22,943.31	3.05	0.0%	37,115.69	37,110.30	5.39	0.0%
4.4	LOAD BALANCING	\$	19,524.53	19,524.53	0.00	0.0%	34,455.56	34,455.56	0.00	0.0%
4.5	SALES COMMDTY	\$	93,699.26	93,699.26	0.00	0.0%	165,351.62	165,351.62	0.00	0.0%
4.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
4.7	TOTAL SALES	\$	137,745.03	137,741.97	3.05	0.0%	238,497.75	238,492.36	5.39	0.0%
4.8	TOTAL T-SERVICE	\$	44,045.77	44,042.71	3.05	0.0%	73,146.13	73,140.75	5.39	0.0%

## EGD RATE ZONE

**ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8	
Rate 110 - Small Ind. Firm - 50% LF							Rate 110 - Average Ind. Firm - 50% LF					
			(A)	(B)	CHANGE				(A)	(B)	CHANGE	
					(A) - (B)	%					(A) - (B)	%
5.1	VOLUME	m³	598,568	598,568	0	0.0%		9,976,121	9,976,121	0	0.0%	
5.2	CUSTOMER CHG.	\$	7,454.64	7,454.64	0.00	0.0%		7,454.64	7,454.64	0.00	0.0%	
5.3	DISTRIBUTION CHG.	\$	16,556.58	16,551.19	5.39	0.0%		271,896.57	271,806.79	89.79	0.0%	
5.4	LOAD BALANCING	\$	34,169.82	34,169.82	0.00	0.0%		569,496.26	569,496.26	0.00	0.0%	
5.5	SALES COMMDTY	\$	165,329.13	165,329.13	0.00	0.0%		2,755,482.11	2,755,482.11	0.00	0.0%	
5.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%	
5.7	TOTAL SALES	\$	223,510.17	223,504.78	5.39	0.0%		3,604,329.58	3,604,239.79	89.79	0.0%	
5.8	TOTAL T-SERVICE	\$	58,181.04	58,175.65	5.39	0.0%		848,847.47	848,757.68	89.79	0.0%	
Rate 110 - Average Ind. Firm - 75% LF							Rate 115 - Large Ind. Firm - 80% LF					
			(A)	(B)	CHANGE				(A)	(B)	CHANGE	
					(A) - (B)	%					(A) - (B)	%
6.1	VOLUME	m³	9,976,120	9,976,120	0	0.0%		69,832,850	69,832,850	0	0.0%	
6.2	CUSTOMER CHG.	\$	7,454.64	7,454.64	0.00	0.0%		7,901.28	7,901.28	0.00	0.0%	
6.3	DISTRIBUTION CHG.	\$	221,637.98	221,548.20	89.79	0.0%		1,262,732.15	1,262,103.66	628.50	0.0%	
6.4	LOAD BALANCING	\$	569,496.20	569,496.20	0.00	0.0%		3,754,339.81	3,754,339.81	0.00	0.0%	
6.5	SALES COMMDTY	\$	2,755,481.83	2,755,481.83	0.00	0.0%		19,288,375.58	19,288,375.58	0.00	0.0%	
6.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%	
6.7	TOTAL SALES	\$	3,554,070.66	3,553,980.87	89.79	0.0%		24,313,348.82	24,312,720.32	628.50	0.0%	
6.8	TOTAL T-SERVICE	\$	798,588.83	798,499.04	89.79	0.0%		5,024,973.24	5,024,344.74	628.50	0.0%	

**EGD RATE ZONE**

**ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS**  
**INCLUDING FEDERAL CARBON PRICING IMPACTS FOR EPS PARTICIPANTS AND RIDER K BILL 32**

**(A) EB-2022-0219 Inclusive of 2023 Federal Carbon Pricing vs (B) EB-2022-0219 Inclusive of 2022 Federal Carbon Pricing**

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
Rate 135 - Seasonal Firm							Rate 170 - Average Ind. Interr. - 50% LF						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
7.1	VOLUME	m³	598,567	598,567	0	0.0%		9,976,121	9,976,121	0	0.0%		
7.2	CUSTOMER CHG.	\$	1,470.24	1,470.24	0.00	0.0%		3,551.16	3,551.16	0.00	0.0%		
7.3	DISTRIBUTION CHG.	\$	13,366.17	13,360.78	5.39	0.0%		119,573.54	119,483.75	89.79	0.1%		
7.4	LOAD BALANCING	\$	26,127.81	26,127.81	0.00	0.0%		447,544.65	447,544.65	0.00	0.0%		
7.5	SALES COMMDTY	\$	165,373.11	165,373.11	0.00	0.0%		2,755,482.09	2,755,482.09	0.00	0.0%		
7.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%		
7.7	TOTAL SALES	\$	206,337.33	206,331.94	5.39	0.0%		3,326,151.44	3,326,061.65	89.79	0.0%		
7.8	TOTAL T-SERVICE	\$	40,964.22	40,958.83	5.39	0.0%		570,669.35	570,579.56	89.79	0.0%		
Rate 170 - Average Ind. Interr. - 75% LF							Rate 170 - Large Ind. Interr. - 75% LF						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
8.1	VOLUME	m³	9,976,120	9,976,120	0	0.0%		69,832,850	69,832,850	0	0.0%		
8.2	CUSTOMER CHG.	\$	3,551.16	3,551.16	0.00	0.0%		3,551.16	3,551.16	0.00	0.0%		
8.3	DISTRIBUTION CHG.	\$	111,892.14	111,802.35	89.79	0.1%		665,577.45	664,948.95	628.50	0.1%		
8.4	LOAD BALANCING	\$	447,544.60	447,544.60	0.00	0.0%		3,132,812.67	3,132,812.67	0.00	0.0%		
8.5	SALES COMMDTY	\$	2,755,481.82	2,755,481.82	0.00	0.0%		19,288,375.47	19,288,375.47	0.00	0.0%		
8.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%		0.00	0.00	0.00	0.0%		
8.7	TOTAL SALES	\$	3,318,469.72	3,318,379.93	89.79	0.0%		23,090,316.75	23,089,688.26	628.50	0.0%		
8.8	TOTAL T-SERVICE	\$	562,987.90	562,898.12	89.79	0.0%		3,801,941.28	3,801,312.78	628.50	0.0%		

ENBRIDGE GAS INC.  
EGD Rate Zone  
TABLE 5: SUMMARY OF 2021 FEDERAL CARBON DEFERRAL AND VARIANCE ACCOUNTS

		Col. 1	Col. 2	Col. 3	Col. 4
Line	Rate	Customer Carbon Charge - Variance Account <sup>1</sup>	Facility Carbon Charge - Variance Account <sup>1</sup>	Greenhouse Gas Emissions Administration Deferral Account <sup>1</sup>	Total
		(\$000's)	(\$000's)	(\$000's)	(Col. 1 + Col. 2 + Col. 3) (\$000's)
1.1	Balance	-	(234)	2,507	2,273
1.2	Interest	-	(14)	83	68
1	Total	-	(249)	2,590	2,341

Notes:

(1) Exhibit C, Tab 1, Schedule 1.



ENBRIDGE GAS INC.

EGD Rate Zone

TABLE 6: SUMMARY OF ALLOCATION OF 2021 FEDERAL CARBON DEFERRAL AND VARIANCE ACCOUNTS

		Col. 1	Col. 2	Col. 3	Col. 4
Line	Rate	Customer Carbon Charge - Variance Account <sup>1</sup>	Facility Carbon Charge - Variance Account <sup>2</sup>	Greenhouse Gas Emissions Administration Deferral Account <sup>3</sup>	Total
		(\$000's)	(\$000's)	(\$000's)	(Col. 1 + Col. 2 + Col. 3) (\$000's)
1.1	1	-	(83)	2,395	2,312
1.2	6	-	(78)	194	116
1.3	9	-	(0)	0	0
1.4	100	-	(1)	0	(1)
1.5	110	-	(19)	0	(19)
1.6	115	-	(7)	0	(7)
1.7	125	-	(12)	0	(12)
1.8	135	-	(1)	0	(1)
1.9	145	-	(0)	0	(0)
1.10	170	-	(4)	0	(4)
1.11	200	-	(3)	0	(3)
1.12	300	-	(0)	0	(0)
1.13	315	-	0	0	0
1.14	332	-	(40)	0	(40)
1	Total	-	(249)	2,590	2,341

Notes:

(1) Exhibit D, Tab 2, Schedule 4, Page 1, Table 7.

(2) Exhibit D, Tab 2, Schedule 4, Page 2, Table 8.

(3) Exhibit D, Tab 2, Schedule 4, Page 3, Table 9.

ENBRIDGE GAS INC.  
EGD Rate Zone  
TABLE 7: 2021 CUSTOMER CARBON CHARGE - VARIANCE ACCOUNT CLEARANCE UNIT RATES

		Col. 1	Col. 2	Col. 3
Line	Rate	Balance to be Cleared <sup>1</sup>	Interest <sup>2</sup>	Total Balance to be Cleared <sup>3</sup>
		(Col. 1 + Col. 2)		
		(\$000's)	(\$000's)	(\$000's)
1.1	1	-	-	-
1.2	6	-	-	-
1.3	9	-	-	-
1.4	100	-	-	-
1.5	110	-	-	-
1.6	115	-	-	-
1.7	125	-	-	-
1.8	135	-	-	-
1.9	145	-	-	-
1.10	170	-	-	-
1.11	200	-	-	-
1.12	300	-	-	-
1.13	315	-	-	-
1.14	332	-	-	-
1	Total	-	-	-

Notes:

- (1) The balance by rate class = The total balance in Line 1, Col. 1 x (volume for each rate class in Col. 4 / total volume in Line 1, Col. 4).  
(2) The interest amount by rate class = The total interest in Line 1, Col. 2 x (the balance for each rate class in Col. 1 / the total balance in Line 1, Col. 1).  
(3) Exhibit D, Tab 2, Schedule 3, Page 1, Line 1, Col. 1.

ENBRIDGE GAS INC.

EGD Rate Zone

TABLE 8: 2021 FACILITY CARBON CHARGE - VARIANCE ACCOUNT CLEARANCE UNIT RATES

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Line	Rate	Balance to be Cleared <sup>1</sup>	Interest <sup>2</sup>	Total Balance to be Cleared <sup>3</sup>	Actual Volumes (Jan - Dec 2021)	Unit Rate
				(Col. 1 + Col. 2)		(Col. 3 / Col. 4)
		(\$000's)	(\$000's)	(\$000's)	(10 <sup>3</sup> m <sup>3</sup> )	(¢/m <sup>3</sup> )
1.1	1	(78)	(5)	(83)	4,748,722	(0.0017)
1.2	6	(73)	(5)	(78)	4,438,432	(0.0017)
1.3	9	(0)	(0)	(0)	3	(0.0017)
1.4	100	(1)	(0)	(1)	33,994	(0.0017)
1.5	110	(18)	(1)	(19)	1,101,890	(0.0017)
1.6	115	(6)	(0)	(7)	387,697	(0.0017)
1.7	125	(12)	(1)	(12)	707,660	(0.0017)
1.8	135	(1)	(0)	(1)	63,112	(0.0017)
1.9	145	(0)	(0)	(0)	24,785	(0.0017)
1.10	170	(4)	(0)	(4)	255,701	(0.0017)
1.11	200	(3)	(0)	(3)	192,010	(0.0017)
1.12	300	(0)	(0)	(0)	269	(0.0017)
1.13	315	0	0	0	0	0.0000
1.14	332	(38)	(2)	(40)	2,288,139	(0.0017)
1	Total	(234)	(14)	(249)	14,242,415	

Notes:

(1) The balance by rate class = The total balance in Line 1, Col. 1 x (volume for each rate class in Col. 4 / total volume in Line 1, Col. 4).

(2) The interest amount by rate class = The total interest in Line 1, Col. 2 x (the balance for each rate class in Col. 1 / the total balance in Line 1, Col. 1).

(3) Exhibit D, Tab 2, Schedule 3, Page 1, Line 1, Col. 2.

ENBRIDGE GAS INC.

EGD Rate Zone

TABLE 9: 2021 GREENHOUSE GAS EMISSIONS ADMINISTRATION DEFERRAL ACCOUNT CLEARANCE UNIT RATES

		Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Line	Rate	2021 Number of Customers	Balance to be Cleared <sup>1</sup>	Interest <sup>2</sup>	Total Balance to be Cleared <sup>3</sup>	Actual Volumes (Jan - Dec 2021)	Unit Rate
			(\$000's)	(\$000's)	(Col. 2 + Col. 3) (\$000's)	(10 <sup>3</sup> m <sup>3</sup> )	(Col. 4 / Col. 5) (¢/m <sup>3</sup> )
1.1	1	2,098,227	2,319	77	2,395	4,748,722	0.0504
1.2	6	169,962	188	6	194	4,438,432	0.0044
1.3	9	2	0	0	0	3	0.0710
1.4	100	16	0	0	0	33,994	0.0001
1.5	110	415	0	0	0	1,101,890	0.0000
1.6	115	17	0	0	0	387,697	0.0000
1.7	125	4	0	0	0	707,660	0.0000
1.8	135	42	0	0	0	63,112	0.0001
1.9	145	20	0	0	0	24,785	0.0001
1.10	170	23	0	0	0	255,701	0.0000
1.11	200	1	0	0	0	192,010	0.0000
1.12	300	2	0	0	0	269	0.0008
1.13	315	0	0	0	0	0	0.0000
1.14	332	1	0	0	0	2,288,139	0.0000
1	Total	2,268,732	2,507	83	2,590	14,242,415	

Notes:

(1) The balance by rate class = The total balance in Line 1, Col. 2 x (number of customer for each rate class in Col. 1 / total number of customer in Line 1, Col. 1).

(2) The interest amount by rate class = The total interest in Line 1, Col. 3 x (the balance for each rate class in Col. 2 / the total balance in Line 1, Col. 2).

(3) Exhibit D, Tab 2, Schedule 3, Page 1, Line 1, Col. 3.

ENBRIDGE GAS INC.

EGD Rate Zone

TABLE 10: 2021 FEDERAL CARBON DEFERRAL AND VARIANCE ACCOUNT CLEARANCE

UNIT RATE SUMMARY BY RATE CLASS

The following adjustment is applicable to consumption volumes for the period January 1 to December 31, 2021.

Rate Class	Non-OBPS	OBPS <sup>1</sup>
	Unit Rate (¢/m <sup>3</sup> )	Unit Rate (¢/m <sup>3</sup> )
Rate 1	0.0487	0.0487
Rate 6	0.0027	0.0027
Rate 9	0.0693	0.0693
Rate 100	(0.0016)	(0.0016)
Rate 110	(0.0017)	(0.0017)
Rate 115	(0.0017)	(0.0017)
Rate 125	(0.0017)	(0.0017)
Rate 135	(0.0016)	(0.0016)
Rate 145	(0.0016)	(0.0016)
Rate 170	(0.0017)	(0.0017)
Rate 200	(0.0017)	(0.0017)
Rate 300	(0.0009)	(0.0009)
Rate 300 Interruptible	(0.0009)	(0.0009)
Rate 315	0.0000	0.0000
Rate 332	(0.0017)	(0.0017)

(1) Includes Voluntary Participants and Other Exempt Gas Volumes.

ENBRIDGE GAS INC.

EGD Rate Zone

TABLE 11: 2021 FEDERAL CARBON DEFERRAL AND VARIANCE ACCOUNT CLEARANCE

UNIT RATE BREAKDOWN BY RATE CLASS

The following adjustment is applicable to consumption volumes for the period January 1 to December 31, 2021.

Rate Class		Non-OBPS (¢/m <sup>3</sup> )	OBPS <sup>1</sup> (¢/m <sup>3</sup> )
Rate 1	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0504</u>	<u>0.0504</u>
	Total	0.0487	0.0487
Rate 6	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0044</u>	<u>0.0044</u>
	Total	0.0027	0.0027
Rate 9	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0710</u>	<u>0.0710</u>
	Total	0.0693	0.0693
Rate 100	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0001</u>	<u>0.0001</u>
	Total	(0.0016)	(0.0016)
Rate 110	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0000</u>	<u>0.0000</u>
	Total	(0.0017)	(0.0017)

Rate Class		Non-OBPS (¢/m <sup>3</sup> )	OBPS <sup>1</sup> (¢/m <sup>3</sup> )
Rate 115	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0000</u>	<u>0.0000</u>
	Total	(0.0017)	(0.0017)
Rate 125	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0000</u>	<u>0.0000</u>
	Total	(0.0017)	(0.0017)
Rate 135	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0001</u>	<u>0.0001</u>
	Total	(0.0016)	(0.0016)
Rate 145	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0001</u>	<u>0.0001</u>
	Total	(0.0016)	(0.0016)
Rate 170	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0000</u>	<u>0.0000</u>
	Total	(0.0017)	(0.0017)
Rate 200	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0000</u>	<u>0.0000</u>
	Total	(0.0017)	(0.0017)

Rate Class		Non-OBPS (¢/m <sup>3</sup> )	OBPS <sup>1</sup> (¢/m <sup>3</sup> )
Rate 300	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0008</u>	<u>0.0008</u>
	Total	(0.0009)	(0.0009)
Rate 300 Interruptible	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0008</u>	<u>0.0008</u>
	Total	(0.0009)	(0.0009)
Rate 315	Customer-Related	0.0000	
	Facility-Related	0.0000	0.0000
	<u>GGEADA</u>	<u>0.0000</u>	<u>0.0000</u>
	Total	0.0000	0.0000
Rate 332	Customer-Related	0.0000	
	Facility-Related	(0.0017)	(0.0017)
	<u>GGEADA</u>	<u>0.0000</u>	<u>0.0000</u>
	Total	(0.0017)	(0.0017)

(1) Includes Voluntary Participants and Other Exempt Gas Volumes.



ENBRIDGE GAS INC.  
EGD Rate Zone  
2021 FEDERAL CARBON DEFERRAL AND VARIANCE ACCOUNT CLEARANCE  
Bill Adjustment for April 2023 for Typical Customers

Item No.	Col. 1	Col. 2	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
		Volume	Annual Bill Impact for Non-OBPS					Annual Bill Impact for OBPS				
		Annual	Unit Rate	Total Adjustment	October 2022 Bill	October 2022 Bill Including Total Adjustment	% Impact	Unit Rate	Total Adjustment	October 2022 Bill	October 2022 Bill Including Total Adjustment	% Impact
		m <sup>3</sup>	¢/m <sup>3</sup>	\$	\$	\$	%	¢/m <sup>3</sup>	\$	\$	\$	%
	<b><u>GENERAL SERVICE</u></b>											
1.1	<b>RATE 1 RESIDENTIAL</b>											
1.2	Heating & Water Heating	2,400	0.0487	1.17	1,572	1,573	0.1%	0.0487	1.17	1,337	1,338	0.1%
2.1	<b>RATE 6 COMMERCIAL</b>											
2.2	Commercial - Heating & Other Uses	22,606	0.0027	0.61	12,821	12,822	0.0%	0.0027	0.61	10,608	10,609	0.0%
2.3	General Use	43,285	0.0027	1.17	23,478	23,479	0.0%	0.0027	1.17	19,241	19,242	0.0%
	<b><u>CONTRACT SERVICE</u></b>											
3.1	<b>RATE 100</b>											
3.2	Industrial - small size	339,188	(0.0016)	(5.43)	168,715	168,710	0.0%	(0.0016)	(5.43)	135,509	135,504	0.0%
4.1	<b>RATE 110</b>											
4.2	Industrial - small size, 50% LF	598,568	(0.0017)	(10.18)	282,105	282,094	0.0%	(0.0017)	(10.18)	223,505	223,495	0.0%
4.3	Industrial - avg. size, 75% LF	9,976,121	(0.0017)	(169.59)	4,530,643	4,530,473	0.0%	(0.0017)	(169.59)	3,553,981	3,553,811	0.0%
5.1	<b>RATE 115</b>											
5.2	Industrial - large size, 80% LF	69,832,850	(0.0017)	(1,187.16)	31,149,356	31,148,169	0.0%	(0.0017)	(1,187.16)	24,312,720	24,311,533	0.0%
6.1	<b>RATE 135</b>											
6.2	Industrial - Seasonal Firm	598,567	(0.0016)	(9.58)	264,932	264,922	0.0%	(0.0016)	(9.58)	206,332	206,322	0.0%
7.1	<b>RATE 145</b>											
7.2	Commercial - avg. size	598,568	(0.0016)	(9.58)	296,848	296,839	0.0%	(0.0016)	(9.58)	238,249	238,239	0.0%
8.1	<b>RATE 170</b>											
8.2	Industrial - avg. size, 75% LF	9,976,120	(0.0017)	(169.59)	4,295,042	4,294,872	0.0%	(0.0017)	(169.59)	3,318,380	3,318,210	0.0%

Notes:

Col. 5 = Col. 3 x Col. 4 / 100.  
Col. 6 is the approved October 2022 annual bill for Sales Service customer from EB-2022-0219, Exhibit C, Tab 4, Schedule 7.  
Col. 7 = Col. 5 + Col. 6.  
Col. 8 = Col. 5 / Col. 6.  
Col. 10 = Col. 3 x Col. 9 / 100.  
Col. 11 is the approved October 2022 annual bill for Sales Service customer from EB-2022-0219, Exhibit C, Tab 4, Schedule 8.  
Col. 12 = Col. 10 + Col. 11.  
Col. 13 = Col. 10 / Col. 11.

ENBRIDGE GAS INC.

## Union Rate Zones

## 2023 Customer-Related Volumes and Derivation of Federal Carbon Charge Unit Rate

Effective April 1, 2023

Line No	Rate Class	Forecast Volumes (10 <sup>3</sup> m <sup>3</sup> ) (1) (a)	Less: Transportation Volumes (10 <sup>3</sup> m <sup>3</sup> ) (b)	Customer-Related Forecast Volumes (10 <sup>3</sup> m <sup>3</sup> ) (2) (c) = (a - b)	EPS Participant & Other Exempt Volumes (10 <sup>3</sup> m <sup>3</sup> ) (3) (d)	Net Volumes (10 <sup>3</sup> m <sup>3</sup> ) (e) = (c - d)	Federal Carbon Charge (\$/m <sup>3</sup> ) (4) (f)	Federal Carbon Cost (\$) (g) = (e * f * 1000)	Federal Carbon Charge Unit Rate (\$/m <sup>3</sup> ) (h) = (g/(e*1000))*100
Union South In-Franchise Delivery									
1	Rate M1	3,176,382	-	3,176,382	2,462	3,173,920	0.1239	393,248,696	
2	Rate M2	1,274,682	-	1,274,682	88,377	1,186,305	0.1239	146,983,129	
3	Rate M4	595,504	-	595,504	213,327	382,177	0.1239	47,351,717	
4	Rate M5	60,359	-	60,359	14,666	45,693	0.1239	5,661,323	
5	Rate M7	759,643	-	759,643	621,224	138,419	0.1239	17,150,083	
6	Rate M9	90,073	-	90,073	90,073	-	0.1239	-	
7	Rate M10	153	-	153	31	122	0.1239	15,080	
8	Rate T1	433,740	-	433,740	327,484	106,256	0.1239	13,165,180	
9	Rate T2	4,967,496	-	4,967,496	4,967,496	-	0.1239	-	
10	Rate T3	249,200	-	249,200	249,200	-	0.1239	-	
11	Total Union South In-Franchise	11,607,231	-	11,607,231	6,574,340	5,032,891		623,575,209	
Union North In-Franchise Delivery									
12	Rate O1	1,014,498	-	1,014,498	285	1,014,213	0.1239	125,661,014	
13	Rate 10	346,813	-	346,813	10,893	335,920	0.1239	41,620,459	
14	Rate 20	846,596	-	846,596	697,373	149,223	0.1239	18,488,790	
15	Rate 25	107,845	-	107,845	95,708	12,137	0.1239	1,503,741	
16	Rate 100	1,056,671	-	1,056,671	1,002,397	54,274	0.1239	6,724,584	
17	Total Union North In-Franchise	3,372,423	-	3,372,423	1,806,656	1,565,767		193,998,589	
18	Total In-Franchise	14,979,654	-	14,979,654	8,380,996	6,598,659		817,573,797	
Ex-Franchise									
19	Rate M12 - Firm Transportation	15,924,706	15,924,706	-	-	-	0.1239	-	
20	Rate M13	58,992	58,992	-	-	-	0.1239	-	
21	Rate M16	293,082	293,082	-	-	-	0.1239	-	
22	Rate M17	31,225	31,225	-	-	-	0.1239	-	
23	Rate C1 - Firm Transportation	7,740,572	7,740,572	-	-	-	0.1239	-	
24	Total Ex-Franchise	24,048,578	24,048,578	-	-	-		-	
25	Total In-Franchise & Ex-Franchise	39,028,232	24,048,578	14,979,654	8,380,996	6,598,659		817,573,797	12.3900

Notes:

- (1) Exhibit B, Tab 3, Schedule 2, Col. 1 + ex-franchise forecast volumes.  
(2) Exhibit B, Tab 3, Schedule 2, Col. 1.  
(3) Exhibit B, Tab 3, Schedule 2, Col. 2.  
(4) Exhibit B, Tab 3, Schedule 6, Line 2.

ENBRIDGE GAS INC.  
Union Rate Zones  
2023 Facility-Related Volumes and Derivation of Facility Carbon Charge Unit Rate  
Effective April 1, 2023

Line No.	Particulars	Forecast Volumes (10 <sup>3</sup> m <sup>3</sup> ) (1) (a)	Federal Carbon Charge (\$/m <sup>3</sup> ) (2) (b)	Facility Carbon Cost (\$) (c)	Facility Carbon Charge Unit Rate (¢/m <sup>3</sup> ) (d)
	Company Use				
1	Buildings	1,753			
2	Boilers/Line Heaters	12,085			
3	NGV Fleet	-			
4	Total Company Use	13,838	0.1239	1,714,561 (3)	
5	Compressor Fuel	156,925		4,626,553 (4)	
6	Total	170,763		6,341,113	0.0162 (5)

Notes:

- (1) Exhibit B, Tab 3, Schedule 3, Col 1.
- (2) Exhibit B, Tab 3, Schedule 6, Line 5.
- (3) Exhibit B, Tab 3, Schedule 6, Line 6. The Company Use cost is for April 1, 2023 to March 31, 2024.
- (4) Exhibit B, Tab 3, Schedule 6, Line 11. The Compressor Fuel cost is for January 1, 2023 to December 31, 2023.
- (5) Total Facility Carbon Cost / Total Forecast Volumes = [column (c) / (Exhibit D, Tab 2, Schedule 1, p. 1, line 25, column (a) x 1000)] x 100.

ENBRIDGE GAS INC.  
Union Rates Zone  
2023 Carbon Charge Unit Rate Summary  
Effective April 1, 2023

Line		
<u>No.</u>	<u>Particulars (¢/m<sup>3</sup>)</u>	<u>Unit Rate</u>
		(a)
1	Federal Carbon Charge	12.3900 (1)
2	Facility Carbon Charge	0.0162 (2)
3	Total (line 1 + line 2)	<u>12.4062</u>

Notes:

- (1) Exhibit D, Tab 3, Schedule 1, p. 1, line 25, column (h).  
(2) Exhibit D, Tab 3, Schedule 1, p. 2, line 6, column (d).

ENBRIDGE GAS INC.  
Union Rate Zones  
Union North In-Franchise  
Calculation of 2023 Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers

		Approved - EB-2022-0219		Proposed - EB-2022-0194			Bill Impact	
Line		Total Bill	Unit Rate	Total Bill	Unit Rate	Total Bill Change	Including Federal Carbon Charge	Excluding Federal Carbon Charge
No.	Particulars	(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)	(%)
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)
	<u>Small Rate 01</u>							
1	Delivery Charges	509	23.1336	509	23.1359	0.05	0.0%	0.0%
2	Federal Carbon Charge	215	9.7900	273	12.3900	57.19	26.6%	0.0%
3	Gas Supply Charges (1)	907	41.2186	907	41.2186	-	0.0%	0.0%
4	Total Bill	1,631	74.1423	1,688	76.7441	57.24	3.5%	0.0%
5	Sales Service Impact					57.24	3.5%	0.0%
6	Bundled-T (Direct Purchase) Impact					57.24	6.3%	0.0%
	<u>Small Rate 10</u>							
7	Delivery Charges	5,796	9.6594	5,797	9.6615	1	0.0%	0.0%
8	Federal Carbon Charge	5,874	9.7900	7,434	12.3900	1,560	26.6%	0.0%
9	Gas Supply Charges (1)	23,664	39.4392	23,664	39.4392	-	0.0%	0.0%
10	Total Bill	35,333	58.8886	36,894	61.4907	1,561	4.4%	0.0%
11	Sales Service Impact					1,561	4.4%	0.0%
12	Bundled-T (Direct Purchase) Impact					1,561	10.0%	0.0%
	<u>Large Rate 10</u>							
13	Delivery Charges	19,254	7.7015	19,259	7.7036	5	0.0%	0.0%
14	Federal Carbon Charge	24,475	9.7900	30,975	12.3900	6,500	26.6%	0.0%
15	Gas Supply Charges (1)	98,598	39.4392	98,598	39.4392	-	0.0%	0.0%
16	Total Bill	142,327	56.9307	148,832	59.5328	6,505	4.6%	0.0%
17	Sales Service Impact					6,505	4.6%	0.0%
18	Bundled-T (Direct Purchase) Impact					6,505	10.8%	0.0%
	<u>Small Rate 20</u>							
19	Delivery Charges	94,137	3.1379	94,200	3.1400	63	0.1%	0.1%
20	Federal Carbon Charge	293,700	9.7900	371,700	12.3900	78,000	26.6%	0.0%
21	Gas Supply Charges (1)	1,034,965	34.4988	1,034,965	34.4988	-	0.0%	0.0%
22	Total Bill	1,422,802	47.4267	1,500,865	50.0288	78,063	5.5%	0.0%
23	Sales Service Impact					78,063	5.5%	0.0%
24	Bundled-T (Direct Purchase) Impact					78,063	16.7%	0.0%
	<u>Large Rate 20</u>							
25	Delivery Charges	370,139	2.4676	370,454	2.4697	315	0.1%	0.1%
26	Federal Carbon Charge	1,468,500	9.7900	1,858,500	12.3900	390,000	26.6%	0.0%
27	Gas Supply Charges (1)	5,118,891	34.1259	5,118,891	34.1259	-	0.0%	0.0%
28	Total Bill	6,957,529	46.3835	7,347,844	48.9856	390,315	5.6%	0.0%
29	Sales Service Impact					390,315	5.6%	0.0%
30	Bundled-T (Direct Purchase) Impact					390,315	18.0%	0.0%
	<u>Average Rate 25</u>							
31	Delivery Charges	75,671	3.3262	75,719	3.3283	48	0.1%	0.1%
32	Federal Carbon Charge	222,723	9.7900	281,873	12.3900	59,150	26.6%	0.0%
33	Gas Supply Charges (1)	752,964	33.0973	752,964	33.0973	-	0.0%	0.0%
34	Total Bill	1,051,357	46.2135	1,110,555	48.8156	59,198	5.6%	0.0%
35	Sales Service Impact					59,198	5.6%	0.0%
36	T-Service (Direct Purchase) Impact					59,198	19.8%	0.1%
	<u>Small Rate 100</u>							
37	Delivery Charges	327,014	1.2112	327,581	1.2133	567	0.2%	0.2%
38	Federal Carbon Charge	2,643,300	9.7900	3,345,300	12.3900	702,000	26.6%	0.0%
39	Gas Supply Charges (1)	10,115,201	37.4637	10,115,201	37.4637	-	0.0%	0.0%
40	Total Bill	13,085,516	48.4649	13,788,083	51.0670	702,567	5.4%	0.0%
41	Sales Service Impact					702,567	5.4%	0.0%
42	T-Service (Direct Purchase) Impact					702,567	23.7%	0.2%
	<u>Large Rate 100</u>							
43	Delivery Charges	2,670,272	1.1126	2,675,312	1.1147	5,040	0.2%	0.2%
44	Federal Carbon Charge	23,496,000	9.7900	29,736,000	12.3900	6,240,000	26.6%	0.0%
45	Gas Supply Charges (1)	89,327,515	37.2198	89,327,515	37.2198	-	0.0%	0.0%
46	Total Bill	115,493,787	48.1224	121,738,827	50.7245	6,245,040	5.4%	0.0%
47	Sales Service Impact					6,245,040	5.4%	0.0%
48	T-Service (Direct Purchase) Impact					6,245,040	23.9%	0.2%

Notes:

(1) Gas Supply charges based on Union North East Zone.

ENBRIDGE GAS INC.  
Union Rate Zones  
Union South In-Franchise  
Calculation of 2023 Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers

Line No.	Particulars	Approved - EB-2022-0219		Proposed - EB-2022-0194		Total Bill Change (\$) (e) = (c - a)	Bill Impact	
		Total Bill (\$) (a)	Unit Rate (cents/m <sup>3</sup> ) (b)	Total Bill (\$) (c)	Unit Rate (cents/m <sup>3</sup> ) (d)		Including Federal Carbon Charge (%) (f) = (e / a)	Excluding Federal Carbon Charge (%) (g)
	<b>Small Rate M1</b>							
1	Delivery Charges	430	19.5250	430	19.5273	0.05	0.0%	0.0%
2	Federal Carbon Charge	215	9.7900	273	12.3900	57.19	26.6%	0.0%
3	Gas Supply Charges	718	32.6350	718	32.6350	-	0.0%	0.0%
4	Total Bill	1,363	61.9500	1,420	64.5518	57.24	4.2%	0.0%
5	Sales Service Impact					57.24	4.2%	0.0%
6	Direct Purchase Impact					57.24	8.9%	0.0%
	<b>Small Rate M2</b>							
7	Delivery Charges	4,798	7.9966	4,799	7.9987	1	0.0%	0.0%
8	Federal Carbon Charge	5,874	9.7900	7,434	12.3900	1,560	26.6%	0.0%
9	Gas Supply Charges	19,581	32.6349	19,581	32.6349	-	0.0%	0.0%
10	Total Bill	30,253	50.4215	31,814	53.0236	1,561	5.2%	0.0%
11	Sales Service Impact					1,561	5.2%	0.0%
12	Direct Purchase Impact					1,561	14.6%	0.0%
	<b>Large Rate M2</b>							
13	Delivery Charges	16,393	6.5574	16,399	6.5595	5	0.0%	0.0%
14	Federal Carbon Charge	24,475	9.7900	30,975	12.3900	6,500	26.6%	0.0%
15	Gas Supply Charges	81,587	32.6349	81,587	32.6349	-	0.0%	0.0%
16	Total Bill	122,456	48.9823	128,961	51.5844	6,505	5.3%	0.0%
17	Sales Service Impact					6,505	5.3%	0.0%
18	Direct Purchase Impact					6,505	15.9%	0.0%
	<b>Small Rate M4</b>							
19	Delivery Charges	57,259	6.5439	57,277	6.5460	18	0.0%	0.0%
20	Federal Carbon Charge	85,663	9.7900	108,413	12.3900	22,750	26.6%	0.0%
21	Gas Supply Charges	285,555	32.6349	285,555	32.6349	-	0.0%	0.0%
22	Total Bill	428,477	48.9688	451,245	51.5709	22,768	5.3%	0.0%
23	Sales Service Impact					22,768	5.3%	0.0%
24	Direct Purchase Impact					22,768	15.9%	0.0%
	<b>Large Rate M4</b>							
25	Delivery Charges	471,392	3.9283	471,644	3.9304	252	0.1%	0.1%
26	Federal Carbon Charge	1,174,800	9.7900	1,486,800	12.3900	312,000	26.6%	0.0%
27	Gas Supply Charges	3,916,188	32.6349	3,916,188	32.6349	-	0.0%	0.0%
28	Total Bill	5,562,380	46.3532	5,874,632	48.9553	312,252	5.6%	0.0%
29	Sales Service Impact					312,252	5.6%	0.0%
30	Direct Purchase Impact					312,252	19.0%	0.1%
	<b>Small Rate M5</b>							
31	Delivery Charges	38,549	4.6726	38,566	4.6747	17	0.0%	0.0%
32	Federal Carbon Charge	80,768	9.7900	102,218	12.3900	21,450	26.6%	0.0%
33	Gas Supply Charges	269,238	32.6349	269,238	32.6349	-	0.0%	0.0%
34	Total Bill	388,554	47.0975	410,022	49.6996	21,467	5.5%	0.0%
35	Sales Service Impact					21,467	5.5%	0.0%
36	Direct Purchase Impact					21,467	18.0%	0.0%
	<b>Large Rate M5</b>							
37	Delivery Charges	227,755	3.5039	227,891	3.5060	137	0.1%	0.1%
38	Federal Carbon Charge	636,350	9.7900	805,350	12.3900	169,000	26.6%	0.0%
39	Gas Supply Charges	2,121,269	32.6349	2,121,269	32.6349	-	0.0%	0.0%
40	Total Bill	2,985,373	45.9288	3,154,510	48.5309	169,137	5.7%	0.0%
41	Sales Service Impact					169,137	5.7%	0.0%
42	Direct Purchase Impact					169,137	19.6%	0.1%
	<b>Small Rate M7</b>							
43	Delivery Charges	885,864	2.4607	886,620	2.4628	756	0.1%	0.1%
44	Federal Carbon Charge	3,524,400	9.7900	4,460,400	12.3900	936,000	26.6%	0.0%
45	Gas Supply Charges	11,748,564	32.6349	11,748,564	32.6349	-	0.0%	0.0%
46	Total Bill	16,158,828	44.8856	17,095,584	47.4877	936,756	5.8%	0.0%
47	Sales Service Impact					936,756	5.8%	0.0%
48	Direct Purchase Impact					936,756	21.2%	0.1%
	<b>Large Rate M7</b>							
49	Delivery Charges	3,216,019	6.1847	3,217,111	6.1868	1,092	0.0%	0.0%
50	Federal Carbon Charge	5,090,800	9.7900	6,442,800	12.3900	1,352,000	26.6%	0.0%
51	Gas Supply Charges	16,970,148	32.6349	16,970,148	32.6349	-	0.0%	0.0%
52	Total Bill	25,276,967	48.6096	26,630,059	51.2117	1,353,092	5.4%	0.0%
53	Sales Service Impact					1,353,092	5.4%	0.0%
54	Direct Purchase Impact					1,353,092	16.3%	0.0%

ENBRIDGE GAS INC.  
Union Rate Zones  
Union South In-Franchise  
Calculation of 2023 Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers

Line No.	Particulars	Approved - EB-2022-0219		Proposed - EB-2022-0194		Bill Impact		
		Total Bill	Unit Rate	Total Bill	Unit Rate	Total Bill Change	Including Federal Carbon Charge	Excluding Federal Carbon Charge
		(\$)	(cents/m <sup>3</sup> )	(\$)	(cents/m <sup>3</sup> )	(\$)	(%)	(%)
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)
	<u>Small Rate M9</u>							
1	Delivery Charges	210,272	3.0255	210,418	3.0276	146		0.1%
2	Gas Supply Charges	2,268,126	32.6349	2,268,126	32.6349	-		0.0%
3	Total Bill	2,478,397	35.6604	2,478,543	35.6625	146		0.0%
4	Sales Service Impact					146		0.0%
5	Direct Purchase Impact					146		0.1%
	<u>Large Rate M9</u>							
6	Delivery Charges	623,827	3.0916	624,251	3.0937	424		0.1%
7	Gas Supply Charges	6,585,070	32.6349	6,585,070	32.6349	-		0.0%
8	Total Bill	7,208,897	35.7265	7,209,321	35.7286	424		0.0%
9	Sales Service Impact					424		0.0%
10	Direct Purchase Impact					424		0.1%
	<u>Average Rate M10</u>							
11	Delivery Charges	8,064	8.5330	8,066	8.5351	2		0.0%
12	Gas Supply Charges	30,840	32.6349	30,840	32.6349	-		0.0%
13	Total Bill	38,904	41.1679	38,906	41.1700	2		0.0%
14	Sales Service Impact					2		0.0%
15	Direct Purchase Impact					2		0.0%
	<u>Small Rate T1</u>							
16	Delivery Charges	170,450	2.2615	170,609	2.2636	158	0.1%	0.1%
17	Federal Carbon Charge	737,872	9.7900	933,834	12.3900	195,962	26.6%	0.0%
18	Gas Supply Charges	2,459,692	32.6349	2,459,692	32.6349	-	0.0%	0.0%
19	Total Bill	3,368,015	44.6864	3,564,135	47.2885	196,120	5.8%	0.0%
20	Sales Service Impact					196,120	5.8%	0.0%
21	Direct Purchase Impact					196,120	21.6%	0.1%
	<u>Average Rate T1</u>							
22	Delivery Charges	265,382	2.2945	265,625	2.2966	243	0.1%	0.1%
23	Federal Carbon Charge	1,132,305	9.7900	1,433,020	12.3900	300,714	26.6%	0.0%
24	Gas Supply Charges	3,774,532	32.6349	3,774,532	32.6349	-	0.0%	0.0%
25	Total Bill	5,172,220	44.7194	5,473,177	47.3215	300,957	5.8%	0.0%
26	Sales Service Impact					300,957	5.8%	0.0%
27	Direct Purchase Impact					300,957	21.5%	0.1%
	<u>Large Rate T1</u>							
28	Delivery Charges	598,813	2.3369	599,351	2.3390	538	0.1%	0.1%
29	Federal Carbon Charge	2,508,597	9.7900	3,174,824	12.3900	666,226	26.6%	0.0%
30	Gas Supply Charges	8,362,393	32.6349	8,362,393	32.6349	-	0.0%	0.0%
31	Total Bill	11,469,803	44.7618	12,136,568	47.3639	666,764	5.8%	0.0%
32	Sales Service Impact					666,764	5.8%	0.0%
33	Direct Purchase Impact					666,764	21.5%	0.1%
	<u>Small Rate T2</u>							
34	Delivery Charges	761,862	1.2857	763,106	1.2878	1,244	0.2%	0.2%
35	Federal Carbon Charge	5,801,162	9.7900	7,341,818	12.3900	1,540,656	26.6%	0.0%
36	Gas Supply Charges	19,338,136	32.6349	19,338,136	32.6349	-	0.0%	0.0%
37	Total Bill	25,901,160	43.7106	27,443,061	46.3127	1,541,900	6.0%	0.0%
38	Sales Service Impact					1,541,900	6.0%	0.0%
39	Direct Purchase Impact					1,541,900	23.5%	0.2%
	<u>Average Rate T2</u>							
40	Delivery Charges	1,864,920	0.9429	1,869,074	0.9450	4,154	0.2%	0.2%
41	Federal Carbon Charge	19,363,626	9.7900	24,506,162	12.3900	5,142,536	26.6%	0.0%
42	Gas Supply Charges	64,548,520	32.6349	64,548,520	32.6349	-	0.0%	0.0%
43	Total Bill	85,777,066	43.3678	90,923,756	45.9699	5,146,690	6.0%	0.0%
44	Sales Service Impact					5,146,690	6.0%	0.0%
45	Direct Purchase Impact					5,146,690	24.2%	0.2%
	<u>Large Rate T2</u>							
46	Delivery Charges	3,095,123	0.8363	3,102,895	0.8384	7,772	0.3%	0.3%
47	Federal Carbon Charge	36,231,713	9.7900	45,854,027	12.3900	9,622,314	26.6%	0.0%
48	Gas Supply Charges	120,778,175	32.6349	120,778,175	32.6349	-	0.0%	0.0%
49	Total Bill	160,105,011	43.2612	169,735,097	45.8633	9,630,086	6.0%	0.0%
50	Sales Service Impact					9,630,086	6.0%	0.0%
51	Direct Purchase Impact					9,630,086	24.5%	0.3%
	<u>Large Rate T3</u>							
52	Delivery Charges	6,106,748	2.2393	6,112,475	2.2414	5,727		0.1%
53	Gas Supply Charges	88,999,288	32.6349	88,999,288	32.6349	-		0.0%
54	Total Bill	95,106,037	34.8742	95,111,764	34.8763	5,727		0.0%
55	Sales Service Impact					5,727		0.0%
56	Direct Purchase Impact					5,727		0.1%

ENBRIDGE GAS INC.  
Union Rate Zones  
Summary of 2021 Federal Carbon Deferral and Variance Accounts

Line No.	Particulars (\$000's)	Customer Carbon Charge - Variance Account 179-421 (a)	Facility Carbon Charge - Variance Account 179-420 (b)	Greenhouse Gas Emissions Administration Deferral Account 179-422 (c)	Total (d) = (a+b+c)
1	Balance	-	(718)	1,163	445
2	Interest	-	(79)	38	(41)
3	Total (1)	<u>-</u>	<u>(797)</u>	<u>1,201</u>	<u>404</u>

Notes:

(1) Exhibit D, Tab 3, Schedule 3, page 2.



ENBRIDGE GAS INC.  
Union Rate Zones  
Summary of Allocation of 2021 Federal Carbon Deferral and Variance Accounts

Line No.	Particulars (\$000's)	Allocators		Account Balances			
		Jan - Dec 2021 Total Volumes 10 <sup>3</sup> m <sup>3</sup>	Total 2013 A&G (\$000's)	Customer Carbon Charge - Variance Account 179-421	Facility Carbon Charge - Variance Account 179-420 (1)	Greenhouse Gas Emissions Administration Deferral Account 179-422 (2)	Total (f) = (c+d+e)
		(a)	(b)	(c)	(d)	(e)	
<u>Union South In-Franchise</u>							
1	Rate M1	2,897,087	80,159	-	(59)	607	548
2	Rate M2	1,113,864	7,513	-	(22)	57	34
3	Rate M4	610,808	2,801	-	(12)	21	9
4	Rate M5	63,511	3,131	-	(1)	24	22
5	Rate M7	686,353	787	-	(14)	6	(8)
6	Rate M9	90,096	108	-	(2)	1	(1)
7	Rate M10	320	25	-	(0)	0	0
8	Rate T1	453,007	2,036	-	(9)	15	6
9	Rate T2	4,700,474	5,624	-	(95)	43	(52)
10	Rate T3	241,187	627	-	(5)	5	(0)
11	Total South In-Franchise	10,856,707	102,812	-	(219)	778	559
<u>Union North In-Franchise</u>							
12	Rate 01	929,941	31,817	-	(19)	241	222
13	Rate 10	311,794	2,759	-	(6)	21	15
14	Rate 20	637,600	2,373	-	(13)	18	5
15	Rate 25	958,587	2,089	-	(19)	16	(4)
16	Rate 100	143,898	953	-	(3)	7	4
17	Total North In-Franchise	2,981,820	39,992	-	(60)	303	243
<u>Ex-Franchise</u>							
18	Rate M12	20,144,978	14,918	-	(407)	113	(294)
19	Rate M13	49,031	0	-	(1)	0	(1)
20	Rate M16	346,782	21	-	(7)	0	(7)
21	Rate M17	21,446	-	-	(0)	-	(0)
22	Rate C1	5,054,644	323	-	(102)	2	(100)
23	Excess Utility Storage Space	-	597	-	-	5	5
24	Total Ex-Franchise	25,616,880	15,859	-	(517)	120	(397)
25	Total In-Franchise & Ex-Franchise	39,455,407	158,663	-	(797)	1,201	404

Notes:

- (1) Allocated in proportion to column (a).  
(2) Allocated in proportion to column (b).

ENBRIDGE GAS INC.  
Union Rate Zones  
Unit Rates for One-Time Adjustment - Delivery  
2021 Federal Carbon Deferral and Variance Account Disposition

Line No.	Particulars	Rate Class	Deferral Balance for Disposition (\$000's) (1) (a)	Volume (10 <sup>3</sup> m <sup>3</sup> ) (b)	Unit Rate (cents/m <sup>3</sup> ) (c) = (a / b)*100
	<u>Union North</u>				
1	Small Volume General Service	01	222	929,941	0.0239
2	Large Volume General Service	10	15	311,794	0.0047
3	Medium Volume Firm Service	20	5	637,600	0.0008
4	Large Volume Interruptible	25	(4)	958,587	(0.0004)
5	Large Volume High Load Factor	100	4	143,898	0.0030
	<u>Union South</u>				
6	Small Volume General Service	M1	548	2,897,087	0.0189
7	Large Volume General Service	M2	34	1,113,864	0.0031
8	Firm Com/Ind Contract	M4	9	610,808	0.0015
9	Interruptible Com/Ind Contract	M5	22	63,511	0.0353
10	Special Large Volume Contract	M7	(8)	686,353	(0.0012)
11	Large Wholesale	M9	(1)	90,096	(0.0011)
12	Small Wholesale	M10	0	320	0.0580
13	Contract Carriage Service	T1	6	453,007	0.0014
14	Contract Carriage Service	T2	(52)	4,700,474	(0.0011)
15	Contract Carriage- Wholesale	T3	(0)	241,187	(0.0001)
16	Total		802		

Notes:

(1) Exhibit D, Tab 3, Schedule 3, page 2, column (f).

ENBRIDGE GAS INC.  
Union Rate Zones  
Ex-Franchise Amounts for Disposition  
2021 Federal Carbon Deferral and Variance Account Disposition

Line No.	Particulars (\$000's) (1)	Rate Class	Deferral Balance for Disposition (\$000's) (2) (a)
1	Storage and Transportation	M12	(294)
2	Local Production	M13	(1)
3	Storage Transportation Service	M16	(7)
4	Transportation Service	M17	(0)
5	Short-Term Cross Franchise	C1	<u>(100)</u>
6	Total Ex-Franchise		(402)

Notes:

- (1) Exhibit D, Tab 3, Schedule 3, page 2, column (f).  
(2) Ex-franchise M12, M13, M16, M17 and C1 customer specific amounts determined using approved deferral account allocation methodologies.

ENBRIDGE GAS INC.  
Union Rate Zones  
Typical Bill Impacts  
2021 Federal Carbon Deferral and Variance Account Disposition

		Volume	Annual Bill Impact for Non-OBPS					Annual Bill Impact for OBPS				
Line		Annual	Unit Rate	Total Adjustment	October 2022	October 2022 Bill		Unit Rate	Total Adjustment	October 2022	October 2022 Bill	
No.		m <sup>3</sup>	(1)	\$	Bill (2)	Including Total	Impact	(1)	\$	Bill (2)	Including Total	Impact
			¢/m <sup>3</sup>			Adjustment	%	¢/m <sup>3</sup>			Adjustment	%
		(a)	(b)	(c) = (a x b) / 100	(d)	(e) = (d + c)	(f) = (c / d)	(g)	(h) = (a x g) / 100	(i)	(j) = (i + h)	(k) = (h / i)
GENERAL SERVICE												
Union North												
1	Small Rate 01	2,200	0.0239	0.53	907	907	0.1%	0.0239	0.53	398	398	0.1%
2	Small Rate 10	60,000	0.0047	2.81	23,664	23,666	0.0%	0.0047	2.81	17,868	17,871	0.0%
3	Large Rate 10	250,000	0.0047	11.70	98,598	98,610	0.0%	0.0047	11.70	79,344	79,356	0.0%
Union South												
4	Small Rate M1	2,200	0.0189	0.42	718	718	0.1%	0.0189	0.42	288	289	0.1%
5	Small Rate M2	60,000	0.0031	1.85	19,581	19,583	0.0%	0.0031	1.85	14,783	14,785	0.0%
6	Large Rate M2	250,000	0.0031	7.72	81,587	81,595	0.0%	0.0031	7.72	65,194	65,202	0.0%
CONTRACT SERVICE												
Union North												
7	Small Rate 20	3,000,000	0.0008	24	1,034,965	1,034,989	0.0%	0.0008	24	940,828	940,851	0.0%
8	Large Rate 20	15,000,000	0.0008	120	5,118,891	5,119,010	0.0%	0.0008	120	4,748,752	4,748,872	0.0%
9	Average Rate 25	2,275,000	(0.0004)	(8)	752,964	752,955	0.0%	(0.0004)	(8)	677,292	677,284	0.0%
10	Small Rate 100	27,000,000	0.0030	809	10,115,201	10,116,010	0.0%	0.0030	809	9,788,187	9,788,996	0.0%
11	Large Rate 100	240,000,000	0.0030	7,188	89,327,515	89,334,703	0.0%	0.0030	7,188	86,657,243	86,664,431	0.0%
Union South												
12	Small Rate M4	875,000	0.0015	13	285,555	285,568	0.0%	0.0015	13	228,296	228,309	0.0%
13	Large Rate M4	12,000,000	0.0015	174	3,916,188	3,916,362	0.0%	0.0015	174	3,444,796	3,444,971	0.0%
14	Small Rate M5 Interruptible	825,000	0.0353	291	269,238	269,529	0.1%	0.0353	291	230,689	230,980	0.1%
15	Large Rate M5 Interruptible	6,500,000	0.0353	2,295	2,121,269	2,123,563	0.1%	0.0353	2,295	1,893,514	1,895,808	0.1%
16	Small Rate M7	36,000,000	(0.0012)	(414)	11,748,564	11,748,150	0.0%	(0.0012)	(414)	10,862,700	10,862,286	0.0%
17	Large Rate M7	52,000,000	(0.0012)	(599)	16,970,148	16,969,549	0.0%	(0.0012)	(599)	13,754,129	13,753,530	0.0%
18	Small Rate M9	6,950,000						(0.0011)	(77)	2,268,126	2,268,048	0.0%
19	Large Rate M9	20,178,000						(0.0011)	(225)	6,585,070	6,584,846	0.0%
20	Average Rate M10	94,500						0.0580	55	30,840	30,895	0.2%
21	Small Rate T1	7,537,000	0.0014	104	2,459,692	2,459,797	0.0%	0.0014	104	2,289,242	2,289,346	0.0%
22	Average Rate T1	11,565,938	0.0014	160	3,774,532	3,774,692	0.0%	0.0014	160	3,509,150	3,509,310	0.0%
23	Large Rate T1	25,624,080	0.0014	354	8,362,393	8,362,747	0.0%	0.0014	354	7,763,580	7,763,934	0.0%
24	Small Rate T2	59,256,000	(0.0011)	(660)	19,338,136	19,337,476	0.0%	(0.0011)	(660)	18,576,275	18,575,615	0.0%
25	Average Rate T2	197,789,850	(0.0011)	(2,203)	64,548,520	64,546,317	0.0%	(0.0011)	(2,203)	62,683,600	62,681,397	0.0%
26	Large Rate T2	370,089,000	(0.0011)	(4,122)	120,778,175	120,774,053	0.0%	(0.0011)	(4,122)	117,683,052	117,678,931	0.0%
27	Large Rate T3	272,712,000						(0.0001)	(143)	88,999,288	88,999,146	0.0%

**Notes:**

- (1) Unit rates calculated at Exhibit D, Tab 3, Schedule 4.  
(2) Typical annual bill for a sales service customer at approved October 2022 QRAM rates (EB-2022-0219).