

VIA EMAIL, RESS and COURIER

October 25, 2019

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319,
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: EB-2019-0194 Enbridge Gas Inc. ("Enbridge Gas")
2020 Rates – Application and Evidence (Incremental Capital Module)**

In Enbridge Gas's 2020 Rates Application filed on October 8, 2019, the Company indicated that it is seeking Board approval for Incremental Capital Module ("ICM") funding for one or two projects. Enbridge Gas indicated that it would file supporting evidence for the ICM request by late October 2019.

The Company confirms that it is seeking ICM funding for two projects - the NPS 30 Don River Replacement Project in the EGD rate zone and the Windsor Line Replacement Project in the Union rate zones.

Please find attached the 2020 ICM evidence including a 2020 Asset Management Plan Addendum. The ICM evidence is filed as Exhibit B, Tab 2, Schedule 1 and the Asset Management Plan Addendum is filed as Exhibit C, Tab 1, Schedule 1.

The bill impact associated with the 2020 ICM funding request as set out in this Application will result in the following bill impacts:

- The bill impact associated with the 2020 ICM funding request for a typical Rate 1 residential customer consuming 2,400 m³ annually in the EGD rate zone is an increase of \$0.40.
- The bill impact associated with the 2020 ICM funding request for a typical Rate M1 residential customer consuming 2,200 m³ annually in the Union South rate zone is an increase of \$1.49.
- There is no bill impact associated with the 2020 ICM funding request for a typical Rate 01 residential customer in the Union North rate zone as there is no ICM project applicable to this rate zones.

These bill impacts are consistent with (and less than) the "less than \$2.00" per customer impact indicated in the 2020 Rates Application.

As explained in Enbridge Gas's October 8, 2019 cover letter attaching the 2020 Rates Application and evidence, the Company requests that the Board determine the IRM rate adjustment aspects of the 2020 Rates Application in advance of considering the ICM projects. The Company repeats its request that the IRM rate adjustment process be completed in time to be implemented with the January 1, 2020 QRAM Application.

Enbridge Gas will file a cost allocation study for the Union rate zones (as required by the MAADs Decision) by mid November 2019. The Company proposes that any consideration of the cost allocation study can be undertaken at the same time as the ICM requests are reviewed.

Please contact the undersigned if you have any questions.

Yours truly,

(Original Signed)

Rakesh Torul
Technical Manager,
Regulatory Applications

cc: David Stevens, Aird and Berlis LLP
EB-2018-0305 Intervenors

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ENBRIDGE GAS INC. 2020 RATE APPLICATION
INCREMENTAL CAPITAL MODULE

1. This evidence supports Enbridge Gas's request for incremental capital module ("ICM") funding for capital investments that are not funded through existing rates. The Board approved the use of an ICM to fund incremental capital during Enbridge Gas's 2019-2023 deferred rebasing period as part of the MAADs Decision.¹ Enbridge Gas received approval for ICM funding by the Board in 2019 for the Kingsville Reinforcement Project and Stratford Reinforcement Project as part of the 2019 Rates Decision.² In this application, Enbridge Gas is seeking ICM funding for two projects in 2020 – the NPS 30 Don River Replacement Project in the EGD rate zone and the Windsor Line Replacement Project in the Union rate zones.
2. This evidence is organized as follows:
 1. Capital Planning Overview
 2. Eligibility for Incremental Capital
 - 2.1 Materiality
 - 2.2 Need
 - 2.3 Prudence
 3. Customer Consultation
 4. Calculation of Revenue Requirement
 5. Cost Allocation
 6. ICM Unit Rates
 7. ICM Bill Impacts

¹ EB-2017-0306/EB-2017-0307, Decision and Order, August 30, 2018. The Decision and Order was later amended by the Board on September 17, 2018 with no material changes.

² EB-2019-0305, Decision and Order, September 12, 2019.

1. CAPITAL PLANNING OVERVIEW

3. Enbridge Gas filed a Utility System Plan (“USP”)³ which included an Asset Management Plan (“AMP”) for each of the EGD and Union rate zones⁴ as part of its 2019 Rates Application (EB-2018-0305) in support of its ICM requests. In the 2019 Rates Decision, the Board found the USP and AMPs acceptable for the purposes of considering the ICM funding requests.⁵
4. As directed in the MAADs Decision, Enbridge Gas will file a consolidated USP to support any ICM requests for 2021 and beyond with its 2021 Rates Application.
5. In support of the 2020 ICM request, Enbridge Gas is filing an Asset Management Plan (“AMP”) Addendum⁶. The Addendum provides an update for budget year 2020 for the EGD and Union rate zones AMPs filed in the USP as part of 2019 Rates Application. The Addendum is not a stand alone document and should be reviewed in conjunction with the two previously filed AMPs. The principles outlined in each of the AMPs filed with the 2019 Rates Application have not changed and the identified asset life cycle strategies have no material changes. Emerging needs, investments, or changes since the AMPs were filed are addressed in the AMP Addendum. Examples in the EGD rate zone include the addition of a new Clarington to Cathcart Integrity Retrofits project, the exclusion of the NPS 20 Don River Relocation based on the assumption that it is 100% rebillable, and the deferral to confirm scope and timing of the Corunna (SCOR) Meter Area Upgrade project. Examples for the Union rate zone include the Waubuno Pool project where pre-spend capital was moved from 2020 to 2021, the addition of the 2021 Kirkwall Hamilton NPS 48 project, additional integrity

³ EB-2018-0305, Exhibit C1, Tab 1, Schedule 1.

⁴ EB-2018-0305, Exhibit C1, Tab 2, Schedule 1 for the EGD rate zone and Exhibit C1, Tab 3, Schedule 1 for the Union rate zones.

⁵ EB-2018-0305, Decision and Order, September 12, 2019, p. 19.

⁶ Exhibit C, Tab 1, Schedule 1.

work, the shift of Kingsville project costs to 2020 and the deferral of the Sarnia Industrial Line Reinforcement project to 2021.

6. Each AMP identifies how Enbridge Gas plans, manages and develops the distribution, transmission, and storage systems for each of the EGD and Union rate zones, and determines the capital investment requirement while balancing risk, performance and cost. The identification of the need for a capital expenditure can either be to satisfy a growth requirement or to resolve degraded condition or performance of an existing asset. In either case, the process to create a new asset is the same. Through the budgeting process, the risks that each project is mitigating are re-evaluated and endorsed.
7. As there are finite resources to complete capital projects, projects are selected for the AMP on the basis of their relative priority. All projects are evaluated and prioritized/optimized to ensure that capital resources are employed to address the highest priority items across all asset categories.
8. Enbridge Gas methodology for project prioritization/optimization considers risk, customer input and preferences, resource availability and asset portfolio strategies. More details on the project prioritization/optimization can be found in each of the EGD and Union AMPs.
9. The historical and forecast capital investments⁷ by category for the 2014 to 2023 period are shown in Table 1 for the EGD rate zone and Table 2 for the Union rate zones. These capital investments will allow Enbridge Gas to continue to meet customer needs and ensure safe and reliable delivery of natural gas to customers.

⁷ In-service capital for the year.

Table 1

Capital Expenditures by category (2014-2023) – EGD Rate Zone (\$ millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual
		(a)	(b)	(c)	(d)	(e)
1	General Plant	69.0	91.9	82.6	48.1	47.3
2	System Access ⁵	112.8	105.2	118.3	109.3	108.9
3	System Renewal	96.5	102.7	109.1	102.2	92.3
4	System Service	190.5	569.6	127.1	20.2	22.9
5	Total Overhead	141.3	145.9	156.4	148.1	140.2
6	Total - EGD Rate Zone	610.1	1,015.3	593.5	427.8	411.6

Line No.	Category	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
		(f)	(g)	(h)	(i)	(j)
1	General Plant	66.3	46.8	67.2	51.1	31.6
2	System Access ⁸	133.2	131.4	127.8	127.4	127.5
3	System Renewal	125.1	168.8	188.9	355.2	171.8
4	System Service	24.9	13.4	11.3	23.4	14.1
5	Total Overhead	135.9	156.8	140.8	143.9	148.4
6	Total - EGD Rate Zone	485.5	517.2	536.0	701.1	493.4

⁸ System access capital does not include Community Expansion and Compressed Natural Gas.

Table 2

Capital Expenditures by category (2014-2023) – Union Rate Zones (\$ millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual
		(a)	(b)	(c)	(d)	(e)
1	General Plant	56.5	51.4	44.8	42.8	48.0
2	System Access ⁶	83.9	107.8	105.6	96.2	83.5
3	System Renewal	83.8	73.0	76.3	87.6	102.5
4	System Service	190.4	391.5	734.3	412.2	198.1
5	Total Overhead	68.2	71.5	77.2	78.6	81.0
6	Total - Union Rate Zones	482.9	695.2	1,038.2	717.5	513.1

Line No.	Category	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
		(f)	(g)	(h)	(i)	(j)
1	General Plant	49.0	52.0	65.8	61.4	63.5
2	System Access ⁹	114.0	86.9	93.7	91.0	97.3
3	System Renewal	119.7	206.9	237.2	135.0	210.6
4	System Service	181.2	106.1	269.6	126.1	178.5
5	Total Overhead	76.0	76.4	80.0	80.0	80.0
6	Total - Union Rate Zones	539.9	528.3	746.3	493.5	629.9

⁶ System access capital does not include Community Expansion and Compressed Natural Gas.

General Plant

10. General plant investments are modifications, replacements or additions to Enbridge Gas's assets that are not part of its commodity-carrying system including land and buildings, tools and equipment, fleet vehicles and electronic devices and software used to support day to day business and operations activities.
11. The historical and forecast general plant capital expenditures are presented in Appendix A in this exhibit, Table A for EGD rate zone and Table B for Union rate zones.

System Access

12. System access investments are additions and modifications (including asset relocation) to Enbridge Gas distribution system that the utility is obligated to perform in order to provide a customer or group of customers with access to natural gas services via the distribution and transmission systems.
13. EGD rate zone system access capital expenditures are mainly driven by Customer Growth, Natural Gas for Vehicles (NGV) and third party driven rebillable relocation projects. Similarly, Union rate zones system access capital expenditures are driven by Customer Growth, and Municipal Replacement.
14. The historical and forecast system access capital expenditures are presented in Appendix A in this exhibit, Table C for EGD rate zone and Table D for Union rate zones.

System Renewal

15. System renewal investments involve replacing and/or refurbishing system assets to extend the original service life of the assets and thereby maintain the ability of Enbridge Gas's system to provide customers with natural gas services.
16. EGD rate zone system renewal capital expenditures are mainly driven by Main Replacements, Meter Exchanges/Replacements, Compressor Equipment, Regulator Refits and Service Relays. Union rate zones system renewal capital expenditures are mainly driven by Stations Replacements, Vintage Pipeline Replacement, the Integrity Management Program, Compression Equipment, and the Meter Exchange Program.
17. The historical and forecast system renewal capital expenditures are presented in Appendix A in this exhibit, Table E for EGD rate zone and Table F for Union rate zones.

System Service

18. System service investments are modifications to Enbridge Gas's distribution system to ensure the system continues to meet distributor operational objectives.
19. EGD rate zone system service capital expenditures are mainly driven by reinforcement projects and integrity initiatives. Union rate zones system service capital expenditures are mainly driven by transmission and distribution system growth, reinforcements, and class location initiatives.
20. The historical and forecast system service capital expenditures are presented in Appendix A in this exhibit, Table G for EGD rate zone and Table H for Union rate zones.

2. ELIGIBILITY FOR ICM CAPITAL

21. In the MAADs Decision, the Board confirmed the availability of ICM funding for Enbridge Gas.¹⁰ As set out in section 4.1.5 of the “Report of the Board – New Policy Options for the Funding of Capital Investments: The Advanced Capital Module, EB-2014-0219”, to be eligible for recovery, capital projects must meet the following criteria: materiality, need and prudence. Each of these criteria is described below in relation to Enbridge Gas’s ICM funding request for 2020.

2.1 MATERIALITY

Materiality Threshold Test

22. As defined by the Board, “a capital budget will be deemed to be material, and as such reflect eligible projects, if it exceeds the Board-defined materiality threshold. Any incremental capital amounts approved for recovery must fit within the total eligible incremental capital amount (as defined in this ACM Report) and must clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing.”¹¹

23. The Board determined the formula to be used to calculate the materiality threshold as follows:

¹⁰ EB-2017-0306/EB-2017-0307, Decision and Order, August 30, 2018, pp.30-34.

¹¹ EB-2014-0219 Report of the OEB – New Policy Options for the Funding of Capital Investments: The Advanced Capital Module, September 18, 2014, p.17.

$$\text{Threshold Value} = 1 + [(RB/d) * (g + PCI * (1 + g))] * ((1 + g) * (1 + PCI))^{n-1} + 10\%$$

Where:

RB = Rate base included in base rates (\$)

d = Depreciation expense included in base rates (\$)

g = Growth factor (%)

PCI = Price cap index (%)

n = Number of years since rebasing

24. The Board's ICM materiality threshold calculation results in a 2020 threshold value of \$490.4 million for the EGD rate zone and \$447.9 million for the combined Union rate zones. The materiality threshold establishes the minimum capital expenditures a utility must fund through base rates. The maximum eligible incremental capital investment for ICM funding is the amount of forecast capital expenditures in the year in excess of the threshold value. The calculation of the ICM materiality threshold value for EGD and Union rate zones is provided in Table 3 below.

Table 3
ICM Threshold Capital Expenditure Calculation by Rate Zone

Line No.	Particulars (\$ millions)	EGD (a)	Union (b)
1	Year	2020	2020
2	Base Year	2018	2013
3	Number of Years since rebasing (n)	2	7
4	Price Cap Index (PCI) (%)	1.36%	1.36%
5	Growth Factor (g) (%)	1.04%	1.54%
6	Dead Band (%)	10%	10%
7	Rate Base (RB)	6,246	5,331 ¹²
8	Depreciation (d)	305	239 ¹³
9	Threshold Value (%)	161%	188%
10	Threshold Value	490.4	447.9

25. A description of the Price Cap Index, growth factor, and rate base and depreciation amounts used in the threshold calculation are provided below.

Price Cap Index

26. The Board's threshold value calculation uses PCI to recognize the increase in revenue generated through annual rate increases in a price cap plan that could be used toward capital investment.

¹² As per the MAADs Decision, the rate base and depreciation associated with projects that were found eligible for capital pass-through treatment during Union's 2014-2018 IRM term are added to the 2013 Board approved rate base and depreciation.

¹³ *Ibid.*

27. Per the 2019 Rates Decision¹⁴, Enbridge Gas has used the current year PCI of 1.36%¹⁵ in the ICM Threshold Capital calculation for both the EGD and Union rate zones.

Growth Factor

28. The 2020 growth factor for the EGD rate zone has been calculated by comparing the percentage difference in annual revenues between 2017 actual revenue and 2018 as the approved base year revenues. The revenue amounts are calculated at the 2018 base year rates.

29. The 2020 growth factor for the Union rate zones has been calculated by comparing the percentage difference in annual revenues between 2018 (the most recent complete year) and 2013 as the approved base year revenues. The revenue amounts are calculated at the 2013 base year rates.

30. To determine the revenue from general service rate classes, Enbridge Gas used the actual customer count and held the normalized average consumption/average use ("NAC/AU") per customer constant with the NAC/AU in base rates. This approach is consistent with the calculation of general service revenue in the 2019 growth factor calculation.

31. Enbridge Gas calculated the 2018 revenue from contract rate class using weather-actual data, as contract-rate customers are generally less weather sensitive and have

¹⁴ EB-2018-0305, Decision and Order, September 12, 2019.

¹⁵ Exhibit B, Tab 1, Schedule 1, pp 5.

a higher proportion of fixed cost recovery as compared to general service customers.
Table 4 below shows the calculation of the 2020 growth factor.

Table 4
2020 Growth Factor by Rate Zone

Line No.	Particulars	(\$ millions)
		(a)
	<u>EGD</u>	
1	2018 Board-approved Distribution Revenues	1,225.1
2	2017 Distribution Revenues	1,212.5
		<hr/>
3	2020 Growth Factor	1.04%
	<u>Union</u>	
4	2018 Distribution Revenues ¹⁶	995.2
5	2013 Board-approved Distribution Revenues ¹⁷	924.0
		<hr/>
6	2020 Growth Factor (Annualized)	1.54%

32. A detailed calculation of the revenues underpinning the growth factor for each rate zone is filed as Appendix B in this exhibit.

Rate Base and Depreciation

33. The threshold calculation uses the rate base and depreciation expense last approved by the Board. Accordingly, the threshold value for the EGD rate zone is based on EGD's 2018 Board-approved rate base and depreciation.

¹⁶ Includes regulated distribution and transmission revenues.

¹⁷ *Ibid.*

34. Pursuant to the MAADs Decision, the threshold value for the Union rate zones is based on Union's 2013 Board-approved rate base and depreciation plus the 2019 forecast amount of rate base and depreciation associated with projects that were eligible for capital pass-through treatment and included in Union's base rates during Union's 2014-2018 IRM term.¹⁸ The details of the rate base and depreciation amounts by rate zone are provided in Table 5 below.

Table 5
ICM Threshold Rate Base and Depreciation Expense by Rate Zone

Line No.	Particulars (\$ millions)	Rate Base (a)	Depreciation (b)
	<u>EGD</u>		
1	2013 Board-Approved	6,246	305
	<u>Union</u>		
2	2013 Board-Approved	3,734	196
3	2019 Capital Pass-Through Amounts ¹⁹	1,597	43
4	Total	5,331	239

Eligible Capital Amount

35. Table 6 below compares the 2020 in-service capital forecast to the ICM materiality threshold by rate zone to calculate the maximum eligible incremental capital.

¹⁸ EB-2017-0306/EB-2017-0307, Decision and Order, September 17, 2018, p. 33.

¹⁹ EB-2018-0305, Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 16, pp. 4-5.

Table 6
Maximum Eligible Incremental Capital by Rate Zone

Line No.	Particulars (\$ millions)	EGD (a)	Union (b)
1	2020 In-Service Capital Forecast	517.2	528.3
2	Less: Materiality Threshold Value	490.4	447.9
3	Maximum Eligible Incremental Capital	26.8	80.4

36. The maximum eligible incremental capital for the EGD rate zone and Union rate zones is \$26.8 million and \$80.4 million, respectively. Enbridge Gas is seeking incremental ICM funding for specific discrete projects that fit within the maximum eligible incremental capital amount planned for each of the EGD and Union rate zones.

37. Table 7 below identifies the eligible capital projects and total in-service capital amounts for the ICM funding requests. Only projects that are discrete and material have been included.

Table 7
2020 Incremental Capital Funding Request by Rate Zone

Line No.	Particulars (\$ millions)	Total Project In-service Amount (a)	Total Project ICM Funding Request (b)	Difference (c) = (b-a)
<i>2020 In-service Capital Forecast</i>				
<u>EGD Rate Zone</u>				
1	Don River Replacement Project (1)	35.4	26.8	(8.6)
<u>Union South Rate Zone</u>				
2	Windsor Line Replacement Project (1)	91.9	80.4	(11.5)
3	Total Incremental Capital Funding Request	127.3	107.2	(20.1)

Notes:

- (1) The total project in-service capital amount was reduced so that the total project ICM funding request did not exceed the maximum eligible incremental capital from Table 6.

2.2 NEED

Means Test

38. A distributor must also pass the Means Test in order to be eligible for ICM funding. As defined by the Board, if a distributor's regulated return in its most recent calculation

exceeds 300 basis points (bps) above the deemed return on equity embedded in the distributor's rates, the funding for any incremental capital project will not be allowed.²⁰

39. Enbridge Gas filed its 2018 Earnings Sharing and Deferral and Variance Account Clearance Application on July 17, 2019, which included 2018 actual utility results for both the EGD and Union rate zones, and neither return exceeded 300 bps above the respective Board-approved ROE.²¹ The 2018 actual ROE for the EGD rate zone was calculated to be 10.82%, which was 182 bps above the 2018 Board-approved ROE of 9.00%, while the actual ROE for the Union rate zones was calculated to be 9.64%, which was 71 bps above the 2013 Board approved ROE of 8.93%. The EGD and Union rate zones 2018 ROE calculations are provided at Appendices C and D in this exhibit.

Discrete and Material Projects

40. ICM funding requests must be based on discrete, material projects. As defined in the Board ACM report, "amounts must be based on discrete projects, and should be directly related to the claimed driver. The amount must be clearly outside of the base upon which the rates were derived".²² Also, as per the MAADs Decision, any individual project for which ICM funding is sought must have an in-service capital addition of at least \$10 million.²³

²⁰ EB-2014-0219 Report of the OEB – New Policy Options for the Funding of Capital Investments: The Advanced Capital Module, September 18, 2014, p.15.

²¹ EB-2019-0105, Exhibit B, Tab 2, Appendix A, Schedule 1 and Exhibit C, Tab 2, Appendix B, Schedule 1, filed: 2019-07-17

²² EB-2014-0219 Report of the OEB – New Policy Options for the Funding of Capital Investments: The Advanced Capital Module, September 18, 2014, p.17.

²³ EB-2017-0306/EB-2017-0307, Decision and Order, August 30, 2018, pp.32-33.

41. There are two Replacement Projects that Enbridge Gas is seeking ICM funding for, the NPS 30 Don River Replacement Project in the EGD rate zone and Windsor Line Replacement Project in the Union rate zones.

42. Each eligible capital project as identified for the EGD rate zone and Union rate zones is a discrete project that exceeds the materiality level of \$10 million. These projects have been evaluated as part of the capital planning process, described in the AMPs as discussed at Section 1. Each project is distinct, with significant influence on Enbridge Gas's operations as described in Table 8.

NPS 30 Don River Replacement Project

43. This project is needed to replace approximately 0.25 km of NPS 30 XHP on the Don River Bridge crossing with a new NPS 30 XHP under the Don River through the use of trenchless technology (microtunnel), and abandonment of the existing pipeline. The Don River Replacement project was subject to a Leave to Construct Application in EB-2018-0108. In its Decision and Order dated November 29, 2018, the OEB found that this project is needed to ensure the safe operation and reliability of the Don Valley Pipeline, as failure to address the risk associated with potential damage to the 89-year old bridge and existing pipeline could have a significant adverse impact on the gas supply to a large number of residential, commercial and industrial customers. The Business Case for this project is filed in Table 8 below.

44. The Don River Replacement Project was included in the AMP for the EGD rate zone filed with the 2019 Rates Application and Enbridge Gas sought ICM Funding for this project with 2019 Rates. The expected in-service date at the time of filing the 2019 Rates Application was October 2019.

45. Due to circumstances beyond the control of Enbridge Gas, the Don River

Replacement Project is now scheduled to be put into service in May 2020. The delay in the in-service date is due to unanticipated delays in obtaining necessary permits. Comprehensive coordination took place with the Toronto Region Conservation Authority (TRCA), the City of Toronto and MetroLinx. The consultation aimed to ensure the pipeline location was installed with consideration of the future flood protection landform in design by the TRCA at the time. Uncertainty in the potential pipeline conflict with the future flood protection landform led to comprehensive discussions and longer than average service level agreements in order to avoid issues with construction, potential relocation within a short period of time after installation and/or conflicts that would inhibit future maintenance activities. Once permits were received, the original construction schedule could no longer be met to tie-in the new pipeline as planned in September 2019. The original schedule planned the tie-in to accommodate requirements under an existing firm service contract with a customer's planned maintenance shut-down. As a result, the construction schedule was re-evaluated to adjust for the delayed permits with consideration of the customer's next planned maintenance shut-down and operational reliability over the upcoming heating season. Due to these two factors, Enbridge Gas will complete the tie-ins during the customer's next planned maintenance shut-down which is scheduled in April 2020. The delay was communicated to the OEB through a Request to Vary. As described in the Request to Vary, alternatives were considered but rejected due to operational risks and network constraints that would be present during the winter heating season.

46. Consistent with Enbridge Gas AMP principles, as noted in EB-2018-0305, Exhibit C1, Tab 2, Schedule 1, Page 87 of 1459, "EGD acknowledges that the identification of risks and the execution of projects is dynamic. As a result, the portfolio is reviewed twice following optimization, to account for execution status, outstanding risks and

opportunities, and emerging risks and opportunities. During the year, the project scope may change or new projects may arise, resulting in cost pressures to the current portfolio. As these pressures are identified, trade-off decisions are made based on risk and available capital, a direct demonstration of EGD's Plan-Do-Check-Act model." The delay to the implementation of the Don River Replacement project and other changes to the 2020 portfolio resulted in reprioritization of capital as outlined in the Addendum in Table 2.1-1. As such, the in-service capital for 2020 was revised, allowing EGI to accommodate a portion of the Don River replacement project within the ICM threshold, leaving \$26.8 million of in-service capital requiring ICM funding.

Windsor Line Replacement Project

47. Enbridge Gas filed a leave to construct application with the OEB for the Windsor Pipeline Replacement Project on August 9, 2019 under docket number EB-2019-0172. This project is needed to replace approximately 64 kms of the existing Windsor NPS 10 pipeline (and some short sections of NPS 8) located in the Municipality of Chatham-Kent and County of Essex with NPS 6 pipeline operating at pressure of 3450 kPa. The proposed NPS 6 pipeline is necessary to replace the existing pipeline due to integrity concerns. Results from surveys and inspections conducted as part of the Enbridge Gas Integrity Management Program identified multiple integrity and depth of cover issues which could pose safety and security of supply concern if not addressed. The replacement of this section of the Windsor Line as proposed is the most effective way of managing its ongoing safety and reliability. The Business Case for this project is filed in Table 8 below.

2.3 Prudence

48. The capital expenditures of the projects for which Enbridge Gas is seeking ICM funding approval for the EGD rate zone and Union rate zones are prudent and represent the most cost effective option for ratepayers.

49. The business case summaries in Table 8 below provide a description of each of the projects' need and prudence, with an overview of options considered.

Table 8

Business Case Summaries for ICM Projects by Rate Zone

EGD Rate Zone

NPS 30 Don River Replacement	
<p>Budget: \$35.4 million</p> <p>Projected In-Service Date: May, 2020</p> <p>In-Service Capital Spend: \$35.4 million 2020 in-service</p>	<p><u>Category of Investment:</u> System Renewal</p> <p><u>Project Description and Drivers:</u></p> <ul style="list-style-type: none"> Replacement of approximately 0.25 km of NPS 30 XHP on the Don River Bridge crossing with a new NPS 30 XHP under the Don River through the use of trenchless technology (microtunnel), and abandonment of the existing pipeline. Removal of the bridge and the abandoned pipeline to follow. Studies have identified structural issues with the Bridge that can become further impaired during flood events which could cause the Bridge to fail resulting in catastrophic failure of the pipeline. The pipeline is a critical feed to the densely populated urban Toronto area. Damage to this crossing at peak design temperature would result in the loss of ~ 92,500 customers, and may take days or weeks to restore service, once the pipeline issue has been addressed. <p><u>Other Options Considered:</u></p> <ul style="list-style-type: none"> <i>Bridge Remediation:</i> This option would not require the NPS 30 pipeline to be replaced.

	<p>Rather, the Bridge itself would be remediated to ensure structural stability against future flood events. Preliminary discussions identified the need for the use of some kind of sheet pile structures as a permanent remediation for the erosion around the bridge abutments. Based on the sensitivity of the adjacent 1911 (107 year old) twin bell and spigot 30" cast iron sanitary sewer mains (on wood piles), this option was deemed not viable. Due to the associated risk with working in the vicinity of these twin sanitary sewers, the option to remediate the bridge was not considered to be an acceptable alternative and therefore an estimated cost and timeline were not completed.</p> <ul style="list-style-type: none">• <i>Bridge Rebuild & Pipe Replacement:</i> Through the consultation process, TRCA provided Enbridge with options to consider for the replacement of the NPS 30 Don River Bridge crossing. One of these options included the possibility of using another above ground crossing. Enbridge explains how City of Toronto Bridges and Structures does not allow pipelines to be installed on bridges. The installation of structural supports to install the pipeline adjacent to existing bridges and create a new bridge to cross over the river would require very large supports. These supports would require footings in the river or on the river bank and there are already a number of structures in this area that would conflict with this approach. In addition, from an Enbridge construction and maintenance perspective, the installation of a pipeline on a bridge is deemed to be a last resort. As a result of all the above, this was not considered a viable alternative and therefore, an estimated cost and timeline was not completed.• <i>Direct Pipe Construction Method:</i>
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	<p>Under this alternative, the bridge would not be utilized and it would eventually be removed. The difference with this alternative relative to the proposed Project is the utilization of a different construction method for replacing the NPS 30 pipeline below ground under the river. During consultation the Direct Pipe method of construction and route considered for that methodology did not satisfy stakeholder concerns and conditions related to possible impacts to the TRCA's existing West Flood Protection Landform (FPL) and/or their proposed East FPL. As such a cost estimate, timelines and environmental impacts were not completed for this option as it was not a viable option.</p> <p>The Don River Replacement project was subject to a leave to construct application in EB-2018-0108. In its Decision and Order dated November 29, 2018, the OEB found that this project is needed to ensure the safe operation and reliability of the Don Valley Pipeline, as failure to address the risk associated with potential damage to the 89-year old bridge and existing pipeline could have a significant adverse impact on the gas supply to a large number of residential, commercial and industrial customers. The OEB also found that EGD adequately addressed environmental issues, land matters, design and safety requirements and adequately discharged the duty to consult with impacted Indigenous communities.²⁴</p> <p>The budget of \$35.4 million is updated from the EB-2018-0108 filing</p>
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²⁴ EB-2018-0108, Decision and Order, November 29, 2018, pp.1-9.

	budget of \$25.6 million. It covers all costs related to material, construction and labour, land costs, contingencies, overheads, and interest during construction.
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Union Rate Zones

Windsor Line Replacement Project	
Budget: \$106.8 million	<u>Category of Investment:</u> System Service
Projected In-Service Date: Nov, 2020	<u>Project Description and Drivers:</u>
In-Service Capital Spend: \$91.9 million 2020 in-service; \$14.9 million 2021 in-service	<ul style="list-style-type: none"> Approximately 64 kms of NPS 6 pipeline operating at pressure of 3450 kPa to replace a section of the existing Windsor NPS 10 pipeline (and some short sections of NPS 8) located in the Municipality of Chatham-Kent and County of Essex. Results from surveys and inspections conducted as part of the Enbridge Gas Integrity Management Program identified multiple integrity and depth of cover issues which could pose a safety and security of supply concern if not addressed. All stations and service connections along the replacement will need to be upgraded to be in design conformance with the new higher operating pressure. Proposed facility upgrades include 399 services, 14 station upgrades, 5 new stations and the abandonment of 4 existing stations. The budget covers all costs related to material, construction and labour, environmental protection measures, land acquisitions, contingencies, overheads, and interest during construction.
	<u>Options Considered:</u>

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| | <ul style="list-style-type: none">• Enbridge Gas considered many alternatives including: replacing the existing pipeline size-for-size, replacing the existing pipeline with a pipeline operating at a different MOP, installing a different diameter pipeline, replacing a longer section of the Windsor Line, replacing a shorter section of the Windsor Line, joining previously independent distribution systems, obtaining supply from nearby non-Enbridge Gas pipelines and attempting to reduce demand in impacted areas.• Enbridge Gas reviewed several different pipeline operating pressures when considering alternatives for the Windsor Line.<ul style="list-style-type: none">○ Replacing the pipeline at an operating pressure of 1380 kPa only provides enough capacity to satisfy current demands with little remaining capacity to support forecasted growth. Replacing with a pipeline of 1380 kPa would be an inefficient use of available pressures at the Comber Transmission Station and would drive a larger diameter pipe project when compared to installing a new pipeline operating at a higher MOP.○ Replacing the pipeline at an operating pressure of 1900 kPa would require a pressure cut between the new higher MOP Replacement Pipeline and the Remaining Pipeline. This option does not support forecasted growth and results in a significant increase in costs due to the pressure cut.○ Replacing the pipeline with an NPS 12 operating at 6040 kPa fed directly from the Panhandle Transmission Line would provide increased capacity for growth in the Windsor and Kingsville/Leamington markets. However pressures at the Comber Transmission Station will not be high enough to utilize the full potential of the MOP without the installation of |
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	<p>additional looping upstream. The increased MOP would require additional distribution assets to be installed in order to continue serving current customers supplied directly from the Windsor Line. This option is also significantly more costly and may result in excess capacity.</p> <ul style="list-style-type: none">○ Replacing the pipeline with an NPS 6 operating at 420 KPa would severely decrease the capacity available not only on the Windsor Line but also along numerous downstream distribution systems.● Enbridge Gas also reviewed the options of installing a smaller or larger pipeline operating at 3450 kPa.<ul style="list-style-type: none">○ Installing a NPS 4 pipeline would significantly decrease capacity and would be unable to serve forecasted growth.○ Installing an NPS 8 pipeline operating at 3450 kPa would increase the available capacity, however the growth forecast does not predict that the excess capacity from installing a NPS 8 pipeline will be utilized effectively for the foreseeable future.● Enbridge investigated replacing the entire pipeline including the section that does not have a major leak history and has no active leaks (Remaining Pipeline). Along this section, all valves are operable and there is adequate depth of coverage, and it is therefore not subject to the same integrity concerns. Including the Remaining Pipeline in the project scope would result in significant cost increases as this section of the Windsor Line is located in a much more congested area. The City of Windsor is planning phased road reconstruction along the Remaining Pipeline which is expected to take place over the coming years. Enbridge plans to
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	<p>complete the replacement of portions of the Remaining Pipeline in phases alongside the municipal roadwork.</p> <ul style="list-style-type: none">• Enbridge investigated a reduction in scope and only replacing the highest risk section of the Windsor Line, with a remaining 16 km section of the Windsor Line to continue to operate at 1380 kPa MOP. This would require a new distribution station to supply the remaining pipeline east of Wheatley Road and Goodreau Line. This section of pipeline will continue to be a significant integrity concern with more leaks developing at an increasing frequency and severity, if not replaced.• The distribution systems nearby are not large enough to serve all the existing and forecasted demand without requiring significant reinforcements and additional facilities• There are currently no nearby non-Enbridge pipelines or local producers with facilities or capacity large enough to accommodate the existing and future demands• The proposed pipeline is driven by integrity concerns and not growth demands, therefore the replacement of the Windsor Line cannot be deferred or eliminated by implementing Demand Side Management.• The Proposed Option is the most cost efficient and provides the required capacity to meet current and future demand forecasts. It also provides the opportunity to increase system capacity in the future by replacing the Remaining Pipeline. <p>Enbridge Gas filed a leave to construct application with the OEB for the Windsor Pipeline Replacement Project on August 9, 2019 under docket number EB-2019-0172.</p>
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3. CUSTOMER CONSULTATION

50. Enbridge Gas's customers believe investments should be made in maintaining existing reliability and in safety. Customers want a plan that will keep the system healthy and reliable in the long run, while also ensuring a demonstration of prudence in spending decisions. This feedback is considered in how Enbridge Gas plans, manages and develops assets within each of the rate zones. The projects for which Enbridge Gas is seeking ICM funding address integrity issues, provide for more robust supplies to the system and allow additional customer load to access the system.

4. CALCULATION OF REVENUE REQUIREMENT

51. Table 9 provides the incremental revenue requirement Enbridge Gas is seeking as ICM funding for 2020 ICM projects. The total capital cost of the 2020 ICM funding request is \$107.2 million with an associated total revenue requirement of \$28.8 million from 2020 to 2023 and an average annual revenue requirement of \$7.2 million. The incremental revenue requirement includes costs associated with the capital investment (return on rate base, depreciation expense and associated income taxes) only.

Table 9

Total Incremental Revenue Requirement by Rate Zone

Line							Average
No.	Particulars (\$000's)	2020	2021	2022	2023	Total	Annual

	(a)	(b)	(c)	(d)	(e)	(f) = (e)/4
<u>EGD Rate Zone</u>						
1 Don River Replacement	337	2,321	2,302	2,281	7,241	1,810
<u>Union South Rate Zone</u>						
2 Windsor Line Replacement	(3,453)	8,456	8,343	8,226	21,572	5,393
Total Incremental Revenue						
3 Requirement	(3,116)	10,777	10,645	10,507	28,813	7,203

52. The detailed incremental revenue requirement for each of the 2020 ICM projects for the deferred rebasing period is filed as Appendix E in this exhibit.

53. The return on rate base is calculated using the cost of capital parameters approved by the Board in EGD's 2018 Rate Adjustment Application (EB 2017-0086) for the EGD rate zone and in Union's 2013 Cost of Service application (EB 2011-0210) for the Union rate zones.

54. Depreciation expense is calculated using Board-approved depreciation rates beginning the month following the in-service date of the project in accordance with the accounting policies of Enbridge Gas in 2020.

55. Incremental income taxes as a result of the projects are calculated using the current tax rates. Income taxes include taxes on the equity and preference share return on rate base as well as the utility timing differences associated with the difference between utility income and taxable income, and reflect 100% of the impacts of the

accelerated Capital Cost Allowance.²⁵ Income taxes are grossed up to account for the impact the additional revenue will have on income tax expense.

56. The in-service capital forecast of the Windsor Line Replacement project in 2021 will be included in the in-service capital for purposes of determining the the maximum eligible incremental capital in 2021.

5. COST ALLOCATION

57. Enbridge Gas is proposing to allocate the ICM Project revenue requirement to rate classes based on the most recently approved cost allocation methodology updated for the current year forecast.
58. Enbridge Gas proposes to allocate the annual average net revenue requirements with respect to the Don River Replacement project among different rate classes in EGD rate zone according to the most recent Board approved cost allocation methodology (EB-2017-0086) for the extra high pressure mains greater than 4 inch diameter. The allocator can be found at EB-2017-0086, Exhibit G2, Tab 6, Schedule 3, Page 2, Item 2.1 (Delivery Demand TP > 4 inch allocator).
59. Enbridge Gas proposes to allocate the annual average net revenue requirement with respect to the Windsor Line Replacement project to Union South rate classes in proportion to the forecast Union South in-franchise design day demands. This proposed cost allocation methodology is consistent with the allocation of Other Transmission Demand costs approved by the Board in Union's 2013 approved cost allocation study. The assets installed with the Windsor Line Reinforcement project will

²⁵ On June 21, 2019, Bill C-97, the Budget Implementation Act, 2019, No.1, was given Royal Assent. Bill C-97 includes an "Accelerated Investment Incentive" program which provides for a first-year increase in Capital Cost Allowance ("CCA") deductions on eligible capital assets acquired after November 20, 2018 ("Accelerated CCA").

be categorized as Other Transmission assets. The allocation of Other Transmission costs recognizes other transmission lines are designed to meet Union South in-franchise demands on design day. The current Board-approved methodology for allocating Other Transmission costs was most recently approved by the Board in EB-2014-0182 (Union's Burlington Oakville Pipeline Project).

60. The cost allocation factors and the allocation of project revenue requirement to the rate classes related to the Don River Replacement and the Windsor Line Replacement projects are filed as Appendix F in this exhibit.

6. ICM UNIT RATES

61. Enbridge Gas is seeking approval of ICM unit rates beginning in 2020 for the duration of the deferred rebasing period to recover the total revenue requirement of the Don River Replacement and the Windsor Line Replacement project from 2020 to 2023 as part of this proceeding. To calculate the ICM unit rates, Enbridge Gas used the allocated average annual revenue requirement and the forecast 2020 billing units for each respective rate class. Consistent with the treatment of 2019 approved ICM project unit rates, Enbridge Gas proposes to embed the ICM unit rates in the delivery and transportation charges on the applicable rate schedule and customer bill. The derivation of the ICM unit rates for 2020 ICM Projects is filed as Appendix G in this exhibit.

62. The ICM unit rates presented in Appendix G were prepared assuming an implementation date in rates of January 1, 2020. Following the Board's Decision in this proceeding, Enbridge Gas will file a draft rate order including updated ICM unit rates to reflect recovery of the total revenue requirement of the projects for the deferred rebasing period beginning with the implementation date if different than January 1, 2020.

7. ICM BILL IMPACTS

63. The bill impact associated with the 2020 ICM funding request for a typical Rate 1 residential customer consuming 2,400 m³ annually in the EGD rate zone is an increase of \$0.40.
64. The bill impact associated with the 2020 ICM funding request for a typical Rate M1 residential customer consuming 2,200 m³ annually in the Union South rate zone is an increase of \$1.49.
65. There is no bill impact associated with the 2020 ICM funding request for a typical Rate 01 residential customer in the Union North rate zone as there is no ICM project applicable to this rate zones.
66. The ICM bill impacts by rate class are filed as Appendix H for the EGD rate zone and Appendix I for the Union rate zones in this exhibit. The bill impacts do not reflect other proposed changes, effective January 1, 2020, as provided at Exhibit B, Tab 1, Schedule 1, Section 5.

Table A

General Plant Capital Expenditures by category (2014-2023) – EGD Rate Zone (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	Equipment & Materials	0.4	1.3	-	2.4	2.1	0.6	0.5	0.5	0.5	0.5
2	Furniture/Structures & Improvements	9.4	30.3	22.1	9.4	8.7	15.3	23.1	38.9	19.6	2.5
3	IT Implementation	20.0	20.8	18.6	27.7	32.7	43.0	15.1	21.5	24.9	22.3
4	Land - Storage	1.3	-	-	-	-	-	-	-	-	-
5	Leasehold Improvements	0.8	-	-	-	-	-	-	-	-	-
6	Structures and Improvement - Storage	0.3	0.5	3.9	-	0.2	0.1	-	-	-	-
7	Tools	11.6	3.3	0.7	-	1.3	0.8	0.8	0.8	1.0	1.0
8	Vehicles	5.8	8.1	1.7	6.6	2.3	6.5	7.3	5.5	5.1	5.3
9	WAMS	19.3	27.5	35.7	2.0	-	-	-	-	-	-
10	General Plant - EGD Rate Zone	69.0	91.9	82.6	48.1	47.3	66.3	46.8	67.2	51.1	31.6

Table B

General Plant Capital Expenditures by category (2014-2023) – Union Rate Zones (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	Tools	3.5	2.7	2.4	2.7	2.0	2.0	1.9	1.6	1.6	1.7
2	LNG Capital	-	-	0.1	0.2	-	-	-	-	-	-
3	Maintenance Measurement	-	-	-	0.1	0.8	0.1	0.1	0.1	0.1	0.1
4	Electronics Upgrades	0.1	-	-	-	1.4	-	-	-	-	-
5	Compressor and Dehy Capital Maintenance	9.1	4.2	3.1	6.2	7.7	12.4	7.0	12.0	8.0	8.0
6	Fleet	0.4	0.3	0.2	0.3	-	-	0.1			
7	Land Rights	14.5	14.9	8.7	9.1	12.3	13.3	11.6	15.0	15.0	15.0
8	Service Facilities	0.5	(0.8)	0.2	0.3	-	0.2	0.4	-	-	-
9	Other - Indirect	-	4.1	6.1	1.5	-	-	-	-	-	-
10	Materials	28.5	26.0	23.9	22.4	23.8	21.0	30.9	37.1	36.7	38.7
11	General Plant - Union Rate Zones	56.5	51.4	44.8	42.8	48.0	49.0	52.0	65.8	61.4	63.5

Table C

System Access Capital Expenditures by category (2014-2023) – EGD Rate Zone (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	Commercial	19.5	20.3	26.0	19.5	19.8	19.9	20.7	21.1	20.9	20.9
2	Industrial	0.2	(0.1)	3.7	3.9	(1.9)	3.9	3.9	4.0	3.9	3.9
3	Meters - Capital Purchase Program (Growth)	5.7	7.5	3.4	6.7	5.1	6.5	4.4	6.4	7.1	7.5
4	NGV	0.7	1.5	6.4	2.1	7.2	0.5	3.0	1.0	1.0	0.9
5	Rebillable Relocations	2.7	1.2	9.8	3.5	(2.7)	2.2	3.0	7.7	7.7	7.7
6	Residential	85.6	71.6	66.2	70.8	81.4	100.2	96.4	87.6	86.8	86.6
7	Sales Stations - New	(1.5)	3.2	2.8	2.8	-	-	-	-	-	-
8	System Access - EGD Rate Zone	112.8	105.2	118.3	109.3	108.9	133.2	131.4	127.8	127.4	127.5

Table D

System Access Capital Expenditures by category (2014-2023) – Union Rate Zones (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	CNG	-	-	-	-	-	-	-	-	-	-
2	General Customer Growth	64.3	75.7	85.4	70.0	66.7	89.9	63.8	69.7	67.0	73.3
3	Municipal Replacement	19.6	32.1	20.2	26.2	16.8	24.1	23.1	24.0	24.0	24.0
4	System Access - Union Rate Zones	83.9	107.8	105.6	96.2	83.5	114.0	86.9	93.7	91.0	97.3

Table E

System Renewal Capital Expenditures by category (2014-2023) – EGD Rate Zone (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	Compressor Equipment - Storage	4.5	4.7	5.6	9.7	6.9	3.5	11.7	57.4	11.2	12.0
2	Corrosion Prevention	0.5	1.3	0.5	1.3	1.9	1.2	1.2	1.3	1.3	1.3
3	Field Lines - Storage	0.1	0.7	1.5	0.5	0.3	3.6	1.7	0.6	1.0	3.5
4	Gate & Feeder Stations	7.4	10.8	7.6	5.2	6.2	13.9	11.8	7.3	13.1	10.2
5	Inside Regulator Program	0.1	6.4	6.6	3.1	0.8	0.5	0.5	0.5	0.5	0.5
6	Integrity Digs	9.1	3.9	2.2	1.9	(0.6)	1.0	4.1	-	-	-
7	Integrity Retrofit	0.4	0.1	5.1	0.9	1.1	1.1	8.6	-	-	-
8	Main Replacement	26.5	12.8	18.9	16.1	19.9	23.5	58.7	29.7	244.2	53.4
9	Measurement and Regulating Equipment - Storage	0.5	-	-	-	-	-	-	-	0.7	0.2
10	Meters - Capital Purchase Program (Maintenance)	13.3	17.4	7.9	15.7	11.8	15.2	10.2	15.0	16.6	17.5
11	Non-Rebillable Relocations	-	-	-	-	1.3	3.3	2.0	2.0	2.0	2.0
12	Regulator Refit	15.2	17.9	17.5	12.3	14.0	14.0	16.9	17.9	18.3	18.6
13	Remediation - Customer Assets	-	-	-	1.0	1.0	3.1	2.9	1.0	0.7	0.7
14	Service Relay	10.9	12.8	20.7	21.6	19.7	23.9	24.8	28.0	31.5	34.0
15	Station Rebuilds	4.8	8.1	11.9	9.9	6.5	9.7	9.5	24.9	12.0	12.7
16	Wells and Well Equipment - Storage	3.3	5.8	3.1	3.0	1.5	7.6	4.2	3.3	2.1	5.2
17	System Renewal - EGD Rate Zone	96.5	102.7	109.1	102.2	92.3	125.1	168.8	188.9	355.2	171.8

Table F

System Renewal Capital Expenditures by category (2014-2023) – Union Rate Zones (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	Bare and Unprotected steel	-	-	-	-	-	4.6	13.6	10.7	12.9	9.1
2	Cathodic Protection	5.3	5.5	6.2	7.2	5.9	7.5	8.0	10.0	10.0	6.7
3	Compression Equipment	2.9	3.2	0.9	0.9	0.1	1.2	0.9	1.2	20.0	104.2
4	Compressor Overhauls	2.2	0.4	4.7	0.6	-	-	-	-	0.4	8.9
5	Excess Flow Valves	-	-	-	0.2	-	-	-	-	-	-
6	General Mains Integrity Management Program	3.5	2.3	3.9	4.9	25.5	8.6	2.4	3.4	3.4	3.4
7		12.4	12.3	11.7	20.0	22.7	34.7	34.4	13.8	12.9	12.4
8	Leakage	0.1	-	-	-	-	1.5	2.7	4.3	4.3	4.3
9	LNG Capital Maintenance Measurement Electronics	2.1	0.2	1.0	1.9	0.1	-	0.2	-	6.2	-
10	Upgrades Measurement	1.4	1.5	1.6	2.0	0.3	1.4	4.3	3.3	2.7	2.2
11	Upgrade Meter Exchange Program	6.2	0.3	-	-	-	-	-	-	-	-
12	Replacement of Vaulted Stations Service	25.8	29.2	30.8	29.4	32.7	39.7	33.5	30.5	30.8	31.8
13	Replacement	0.1	-	-	-	-	-	1.4	3.5	1.6	1.5
14		2.8	4.0	4.7	4.6	5.0	5.9	5.2	4.5	4.6	4.7
15	Station Painting	0.3	0.4	-	0.2	1.8	2.2	2.7	2.7	2.7	2.7
16	Stations Capital Maintenance	11.1	7.5	4.5	10.9	8.4	9.6	10.0	16.6	12.6	13.1
17	Storage Integrity	0.5	1.1	1.1	0.8	-	-	0.9	-	-	-
18	Vintage Pipeline Replacement	-	-	-	-	-	-	80.2	124.0	3.0	-
19	General Pipeline Maintenance	7.1	5.1	5.2	3.8	-	2.8	6.5	8.7	6.9	5.6
20	General Pipeline Maintenance – Dawn	-	-	-	0.1	-	-	-	-	-	-
21	System Renewal - Union Rate Zones	83.8	73.0	76.3	87.6	102.5	119.7	206.9	237.2	135.0	210.6

Table G

System Service Capital Expenditures by category (2014-2023) – EGD Rate Zone (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	Carbon Capture	-	-	-	-	-	-	-	-	-	-
2	Integrity Initiatives	3.2	8.8	1.8	4.7	6.7	4.2	3.3	3.4	3.7	2.4
3	MOP	0.9	1.0	0.8	1.4	1.4	-	-	-	-	-
4	Records Integrity	3.1	1.9	1.8	4.6	4.9	0.1	0.1	0.1	0.1	0.1
5	System Reinforcement	10.8	6.8	7.9	4.7	9.9	20.6	10.0	7.8	19.6	11.6
6	GTA	172.4	551.1	114.8	4.8	-	-	-	-	-	-
7	System Service - EGD Rate Zone	190.5	569.6	127.1	20.2	22.9	24.9	13.4	11.3	23.4	14.1

Table H

System Service Capital Expenditures by category (2014-2023) – Union Rate Zones (\$ Millions)

Line No.	Category	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Forecast	2020 Budget	2021 Budget	2022 Budget	2023 Budget
1	Excess Flow Valves	4.3	3.8	1.3	0.7	-	-	-	-	-	-
2	General Mains	0.1	0.1	0.1	-	-	-	-	-	-	-
3	LNG Capital Maintenance	0.1	-	-	0.1	-	-	-	-	-	-
4	Measurement Electronics Upgrades	-	-	-	-	-	-	0.1	-	-	-
5	Measurement Upgrade	0.1	-	0.1	-	-	-	-	-	-	-
6	Storage Integrity	-	0.6	1.7	2.5	-	0.3	0.4	0.3	0.3	0.3
7	Class Location	16.5	14.4	26.7	27.2	19.7	20.4	20.8	20.0	15.0	15.0
8	Compressor and Dehy Capital Maintenance	0.1	-	-	-	-	-	0.8	0.4	-	-
9	Depth of Cover <30% SMYS	-	0.1	-	-	-	-	0.7	0.1	0.5	-
10	Depth of Cover >30% SMYS	-	-	-	-	-	-	-	-	-	-
11	Distribution Reinforcement	5.6	5.9	16.1	9.3	94.5	23.8	5.9	7.2	36.6	21.4
12	Emissions Action Plan	-	0.6	2.3	4.1	-	0.2	-	0.2	0.1	0.1
13	In Franchise Growth	0.5	(0.1)	-	-	-	-	-	-	-	-
14	MOP Verification	-	-	-	-	-	-	-	-	-	5.0
15	Odourant Upgrades	1.1	0.8	0.8	0.7	0.6	1.0	1.4	1.0	1.0	1.0
16	Station Reinforcement	3.1	1.0	0.7	-	0.1	0.5	-	3.8	1.4	54.8
17	Storage Improvements	-	-	0.6	1.1	2.0	0.8	2.5	1.2	1.2	1.3
18	System Growth	157.5	364.0	683.5	366.4	43.1	107.1	13.5	206.9	69.9	69.2
19	Transmission Reinforcement	0.8	0.1	0.4	-	38.1	27.1	59.3	28.4	-	10.3
20	General Safety	0.4	0.1	-	-	-	-	0.7	0.1	0.1	0.1
21	Integrated Resource Planning	-	-	-	0.1	-	-	-	-	-	-
22	System Service - Union Rate Zones	190.4	391.5	734.3	412.2	198.1	181.2	106.1	269.6	126.1	178.5

EGD RATE ZONE
Calculation of 2017 and 2018 Revenue at 2018 Approved Rates

Line No.	Particulars	Billing Units (a)	Rates (cents / m ³) (b)	2017		2018	
				Actual Usage (c)	Revenue (\$000's) (d)	Approved Usage (e)	Revenue (\$000's) (f)
	<u>Rate 1 General Service</u>						
1	Customer Charge	bills	\$ 20.00	23,880,384	477,608	24,180,918	483,618
2	Delivery Charge		6.7333	4,692,453	315,955	4,751,509	319,931
3	Load Balancing	10 ³ m ³	0.3411	4,739,187	16,165	4,750,232	16,203
4	Transportation	10 ³ m ³	0.0235	4,642,794	1,091	4,634,556	1,089
5	Transportation Dawn	10 ³ m ³	0.0078	6,350	0	82,881	6
6	Gas Supply Commodity - System	10 ³ m ³	0.0780	4,526,670	3,531	4,583,611	3,575
7	Total Rate 1				<u>814,350</u>		<u>824,423</u>
	<u>Rate 6 General Service</u>						
8	Monthly Charge	bills	\$ 70.00	1,994,688	139,628	2,010,770	140,754
9	Delivery Charge		3.7157	4,763,339	176,989	4,801,738	178,416
10	Load Balancing	10 ³ m ³	0.3202	4,700,649	15,051	4,829,758	15,465
11	Transportation	10 ³ m ³	0.0235	3,728,115	876	3,620,680	851
12	Transportation Dawn	10 ³ m ³	0.0078	120,041	9	895,132	70
13	Gas Supply Commodity - System	10 ³ m ³	0.0993	2,758,937	2,740	3,121,315	3,099
14	Total Rate 6				<u>335,294</u>		<u>338,655</u>
	<u>Rate 9 Contract Service</u>						
15	Monthly Charge	bills	\$ 235.95	-	-	-	-
	Delivery Charge						
16	First 20,000 m ³	10 ³ m ³	11.2489	-	-	-	-
17	Over 20,000 m ³	10 ³ m ³	10.5292	-	-	-	-
18	Load Balancing	10 ³ m ³	0.0196	-	-	-	-
19	Transportation	10 ³ m ³	0.0235	-	-	-	-
20	Transportation Dawn	10 ³ m ³	0.0078				
21	Gas Supply Commodity - System	10 ³ m ³	0.0431	-	-	-	-
22	Total Rate 9				<u>-</u>		<u>-</u>

EGD RATE ZONE
Calculation of 2017 and 2018 Revenue at 2018 Approved Rates

Line No.	Particulars	Billing Units (a)	Rates (cents / m³) (b)	2017		2018	
				Actual Usage (c)	Revenue (\$000's) (d)	Approved Usage (e)	Revenue (\$000's) (f)
	<u>Rate 100 Contract Service</u>						
1	Monthly Charge	bills	\$ 122.01	36	4	-	-
2	Contract Demand	10³ m³	36.00	403	145	-	-
3	Load Balancing	10³ m³	0.3202	1,184	4	-	-
4	Transportation	10³ m³	0.0236	1,135	0	-	-
5	Transportation Dawn	10³ m³	0.0078	-	-	-	-
6	Gas Supply Commodity - System	10³ m³	0.0993	925	1	-	-
7	Total Rate 100				<u>155</u>		<u>-</u>
	<u>Rate 110 Contract Service</u>						
8	Monthly Charge	bills	\$ 587.37	3156	1,854	3,180	1,868
9	Contract Demand	10³ m³	22.91	49,690	11,384	48,218	11,047
	Delivery Charge		-				
10	First 1,000,000 m³	10³ m³	0.5671	636,539	3,610	639,885	3,629
11	Over 1,000,000 m³	10³ m³	0.4171	161,628	674	149,151	622
12	Load Balancing	10³ m³	0.0713	798,167	569	789,036	563
13	Transportation	10³ m³	0.0235	332,540	78	216,486	51
14	Transportation Dawn	10³ m³	0.0078	61,070	5	474,890	37
15	Gas Supply Commodity - System	10³ m³	0.0433	53,769	23	56,322	24
16	Total Rate 110				<u>18,197</u>		<u>17,840</u>
	<u>Rate 115 Contract Service</u>						
17	Monthly Charge	bills	\$ 622.62	324	202	324	202
18	Contract Demand	10³ m³	24.36	19,026	4,635	20,166	4,912
	Delivery Charge						
19	First 1,000,000 m³	10³ m³	0.2227	172,248	384	170,833	380
20	Over 1,000,000 m³	10³ m³	0.1228	336,395	413	371,998	457
21	Load Balancing	10³ m³	0.0253	508,643	129	542,831	137
22	Transportation	10³ m³	0.0236	52,097	12	11,292	3
23	Transportation Dawn	10³ m³	0.0078	33,170	3	362,012	28
24	Gas Supply Commodity - System	10³ m³	0.0433	95	0	-	-
25	Total Rate 115				<u>5,777</u>		<u>6,120</u>
	<u>Rate 125 Contract Service</u>						
26	Monthly Charge	bills	\$ 500.00	48	24	48	24
27	Contract Demand	10³ m³	10.0427	113,305	11,379	111,124	11,160
28	Total Rate 125				<u>11,403</u>		<u>11,184</u>

EGD RATE ZONE
Calculation of 2017 and 2018 Revenue at 2018 Approved Rates

Line No.	Particulars	Billing Units (a)	Rates (cents / m³) (b)	2017		2018	
				Actual Usage (c)	Revenue (\$000's) (d)	Approved Usage (e)	Revenue (\$000's) (f)
<u>Rate 135 Contract Service</u>							
Winter (December to March)							
1	Monthly Charge	bills	\$ 115.08	180	21	172	19.79
Delivery Charge							
2	First 14,000 m³	10³ m³	7.0437	715	50	664	46.79
3	Next 28,000 m³	10³ m³	5.8445	1,236	72	1,026	59.98
4	Over 42,000 m³	10³ m³	5.4446	5,061	276	2,010	109.44
<u>Rate 135 Contract Service</u>							
Summer (April to November)							
	Monthly Charge	bills	\$ 115.08	360	41	344	40
Delivery Charge							
5	First 14,000 m³	10³ m³	2.3073	4,564	105	4,514	104.15
6	Next 28,000 m³	10³ m³	1.6073	8,419	135	8,724	140.23
7	Over 42,000 m³	10³ m³	1.4074	45,994	647	47,562	669.39
8	Load Balancing	10³ m³	-	65,989	-	64,501	-
9	Transportation	10³ m³	0.0235	40,972	10	18,862	4.43
10	Transportation Dawn	10³ m³	0.0078	474	0	39,641	3.09
11	Gas Supply Commodity - System	10³ m³	0.0503	2,918	1	4,473	2.25
12	Total Rate 135				<u>1,359</u>		<u>1,199</u>
<u>Rate 145 Contract Service</u>							
13	Monthly Charge	bills	\$ 123.34	444	55	432	53
14	Contract Demand	10³ m³	8.23	9,846	810	9,242	761
Delivery Charge							
15	First 14,000 m³	10³ m³	2.6095	4,853	127	5,143	134
16	Next 28,000 m³	10³ m³	1.2507	8,413	105	9,200	115
17	Over 42,000 m³	10³ m³	0.6916	32,839	227	35,793	248
18	Load Balancing	10³ m³	0.1599	46,105	74	50,136	80
19	Transportation	10³ m³	0.0236	12,854	3	10,692	3
20	Transportation Dawn	10³ m³	0.0078	4,367	0	25,167	2
21	Gas Supply Commodity - System	10³ m³	0.0469	6,897	3	8,575	4
22	Total Rate 145				<u>1,404</u>		<u>1,399</u>

EGD RATE ZONE
Calculation of 2017 and 2018 Revenue at 2018 Approved Rates

Line No.	Particulars	Billing Units	Rates (cents / m ³)	2017		2018	
				Actual Usage	Revenue (\$000's)	Approved Usage	Revenue (\$000's)
				(c)	(d)	(e)	(f)
	<u>Rate 170 Contract Service</u>						
1	Monthly Charge	bills	\$ 279.31	312	87	300	84
2	Contract Demand	10 ³ m ³	4.0900	35,822	1,465	32,846	1,343
	Delivery Charge						
3	First 1,000,000 m ³	10 ³ m ³	0.2793	212,358	593	193,825	541
4	Over 1,000,000 m ³	10 ³ m ³	0.0793	100,350	80	97,328	77
5	Load Balancing	10 ³ m ³	0.0699	312,709	219	291,152	204
6	Transportation	10 ³ m ³	0.0235	85,930	20	42,446	10
7	Transportation Dawn	10 ³ m ³	0.0078	11,000	1	171,438	13
8	Gas Supply Commodity - System	10 ³ m ³	0.0432	32,576	14	34,475	15
9	Total Rate 170				<u>2,479</u>		<u>2,287</u>
	<u>Rate 200 Contract Service</u>						
10	Monthly Charge	bills		12	-	12	-
11	Contract Demand	10 ³ m ³	14.7000	14,957	2,199	14,801	2,176
	Delivery Charge						
12	Per cubic metre of gas delivered	10 ³ m ³	- 0.0208	173,932	(36)	169,764	(35)
13	Load Balancing	10 ³ m ³	0.3097	173,932	539	169,764	526
14	Transportation	10 ³ m ³	0.0235	167,854	39	129,627	30
15	Transportation Dawn	10 ³ m ³	0.0078	-	-	40,137	3
16	Gas Supply Commodity - System	10 ³ m ³	0.0432	133,678	58	129,627	56
17	Gas Supply Commodity - Buy/Sell	10 ³ m ³	0.0237	-	-	-	-
18	Total Rate 200				<u>2,798</u>		<u>2,756</u>
	<u>Rate 300 Contract Service</u>						
19	Monthly Charge	bills	\$ 500.00	24	12	12	6
20	Contract Demand	10 ³ m ³	27.4365	187	51	187	51
21	Total Rate 300				<u>63</u>		<u>57</u>
	<u>Rate 332 Transportation Service</u>						
22	Monthly Contract Demand	\$/GJ	1.2075	1,200,000	17,388	1,200,000	17,388
23	Total Rate 332				<u>17,388</u>		<u>17,388</u>
	<u>Rate 325 Storage and Transmission</u>						
24	Monthly Charge	bills	\$ 1.00	150	1,800	1	1,800
25	Total Rate 325				<u>1,800</u>		<u>1,800</u>
26	Grand Total				<u>1,212,467</u>		<u>1,225,109</u>

UNION RATE ZONES
Calculation of 2013 and 2018 Revenue at 2013 Approved Rates

Line No.	Particulars	Billing Units	Rates (cents / m ³)	2013		2018	
				Approved Usage	Revenue (\$000's)	Actual Usage	Revenue (\$000's)
				(c)	(d)	(e)	(f)
		(a)	(b)				
	<u>Rate 01</u>						
1	Monthly Charge	bills	\$ 21.00	3,839,732	80,634	4,192,244	88,037
2	Delivery Charge	10 ³ m ³	8.9074	884,421	78,779	965,617	86,012
3	Transportation	10 ³ m ³	0.01169	884,421	103	965,617	113
4	Storage	10 ³ m ³	1.7032	884,421	15,063	965,617	16,446
5	Total Rate 01				174,580		190,608
	<u>Rate 10</u>						
6	Monthly Charge	bills	\$ 70.00	24,629	1,724	25,413	1,779
7	Delivery Charge	10 ³ m ³	5.5035	322,887	17,770	333,165	18,336
8	Transportation	10 ³ m ³	0.0048	322,887	15	333,165	16
9	Storage	10 ³ m ³	1.2478	322,887	4,029	333,165	4,157
10	Total Rate 10				23,539		24,288
	<u>Rate 20</u>						
11	Monthly Charge	bills	\$ 1,000.00	748	748	619	619
	Monthly Demand Charge						
12	First 70,000 m ³	10 ³ m ³ /d	27.8179	23,260	6,470	20,127	5,599
13	All over 70,000 m ³	10 ³ m ³ /d	16.3583	19,701	3,223	56,074	9,173
	Commodity Charge						
14	First 852,000 m ³	10 ³ m ³	0.5135	331,197	1,701	280,790	1,442
15	All over 852,000 m ³	10 ³ m ³	0.3757	298,605	1,122	197,314	741
16	Transportation Account Charge	10 ³ m ³	\$ 219.43	460	101	384	84
		10 ³ m ³					
17	Gas Supply Demand Charge	10 ³ m ³	1.6293	6,873	112	6,296	115
	Fort Frances		0.2175	-	-	-	-
	Western		0.0075	2,650	20	1,332	10
	Northern		0.0182	702	13	1,486	27
	Eastern		0.0226	3,521	79	3,478	78
	Storage (GJ's)						
18	Demand	GJ/d	9.6425	99,288	957	141,504	1,364
19	Commodity	GJ	0.1558	639,477	100	883,380	138
20	Total Rate 20				14,534		19,276
	<u>Rate 25</u>						
21	Monthly Charge	bills	\$ 375.00	842	316	251	94
22	Delivery Charge	10 ³ m ³	2.6004	159,555	4,149	156,126	4,060
23	Transportation Account Charge	bills	\$ 219.43	36	8	158	35
24	Gas Supply Transportation	10 ³ m ³	0.0516	42,913	22	67,055	35
25	Total Rate 25				4,495		4,223
	<u>Rate 100</u>						
26	Monthly Charge	bills	\$ 1,500.00	226	339	154	231
27	Demand	10 ³ m ³ /d	15.3415	71,975	11,042	49,651	7,617
28	Commodity	10 ³ m ³	0.2132	1,895,488	4,042	1,038,045	2,213
29	Transportation Account Charge	bills	\$ 219.43	226	50	154	34
	Storage (GJ's)						
30	Demand	GJ/d	5.5595	15,600	87	12,000	67
31	Commodity	GJ	0.1558	100,000	16	1,700	0
32	Total Rate 100				15,575		10,162
33	Total Union North In-franchise				232,722		248,557

UNION RATE ZONES
Calculation of 2013 and 2018 Revenue at 2013 Approved Rates

Line No.	Particulars	Billing Units (a)	Rates (cents / m ³) (b)	2013		2018	
				Approved Usage (c)	Revenue (\$000's) (d)	Actual Usage (e)	Revenue (\$000's) (f)
	<u>Rate M1</u>						
1	Monthly Charge	bills	\$ 21.00	12,706,802	266,843	13,528,234	284,093
2	Delivery Commodity Charge (avg rate)	10 ³ m ³	3.4245	2,939,543	100,664	3,129,570	107,171
3	Storage	10 ³ m ³	0.7368	2,939,543	21,660	3,129,570	23,060
4	Total Rate M1				<u>389,166</u>		<u>414,324</u>
	<u>Rate M2</u>						
5	Monthly Charge	bills	\$ 70.00	81,451	5,702	89,629	6,274
6	Delivery Commodity Charge (avg rate)	10 ³ m ³	3.8103	975,571	37,173	1,073,522	40,905
7	Storage		0.7550	975,571	7,366	1,073,522	8,106
8	Total Rate M2				<u>50,240</u>		<u>55,284</u>
	<u>Rate M4</u>						
	Monthly Demand Charge						
9	First 8 450 m ³	10 ³ m ³ /d	46.6239	12,905	6,017	21,235	9,901
10	Next 19 700 m ³	10 ³ m ³ /d	20.9050	7,864	1,644	18,461	3,859
11	All over 28 150 m ³	10 ³ m ³ /d	17.5631	4,507	792	3,267	574
	Delivery Commodity Charge						
12	First Block	10 ³ m ³	0.9621	396,153	3,811	653,871	6,291
13	All remaining use	10 ³ m ³	0.4243	8,525	36	496	2
	Interruptible						
14	Monthly Charge	bills	\$ 690.00	-	-	42	29
15	Delivery Commodity Charge (Avg Price)	10 ³ m ³	2.2413	-	-	2,394	54
16	Interruptible Delivery Charge - Days Use Discount						(99)
17	Total Rate M4				<u>12,300</u>		<u>20,610</u>
	<u>Rate M5A</u>						
	Firm Contracts						
18	Monthly Demand Charge	10 ³ m ³ /d	28.6252	626	179	664	190
19	Delivery Commodity Charge	10 ³ m ³	1.9377	17,385	337	8,673	168
	Interruptible Contracts						
20	Monthly Charge	bills	\$ 690.00	1,692	1,167	520	359
21	Delivery Commodity Charge (Avg Price)	10 ³ m ³	2.2413	517,747	11,604	65,334	1,464
22	Total Rate M5A				<u>13,288</u>		<u>2,181</u>
	<u>Rate M7</u>						
	Firm Contracts						
23	Monthly Demand Charge	10 ³ m ³ /d	25.3924	14,220	3,611	27,440	6,968
24	Delivery Commodity Charge	10 ³ m ³	0.3206	142,488	457	417,203	1,338
	Interruptible / Seasonal Contracts						
25	Delivery Commodity Charge	10 ³ m ³	1.2747	4,655	59	96,633	1,232
26	Total Rate M7				<u>4,127</u>		<u>9,537</u>
	<u>Rate M9</u>						
27	Monthly Demand Charge	10 ³ m ³ /d	15.1688	3,993	606	5,083	771
28	Delivery Commodity Charge	10 ³ m ³	0.1990	60,750	121	78,946	157
29	Total Rate M9				<u>727</u>		<u>928</u>
	<u>Rate M10</u>						
30	Delivery Commodity Charge	10 ³ m ³	5.1734	189	10	410	21
31	Total Rate M10				<u>10</u>		<u>21</u>

UNION RATE ZONES
Calculation of 2013 and 2018 Revenue at 2013 Approved Rates

Line No.	Particulars	Billing Units	Rates (cents / m ³)	2013		2018	
				Approved	Revenue	Actual	Revenue
				Usage	(\$000's)	Usage	(\$000's)
		(a)	(b)	(c)	(d)	(e)	(f)
	Rate T1						
	Storage (\$/GJ's)						
	Demand						
	Firm injection / withdrawal						
1	Union provides deliverability inventory	GJ/d	1.624	492,360	800	643,343	1,045
2	Customer provides deliverability inventory	GJ/d	1.197	166,800	200	-	-
3	Incremental firm injection right	GJ/d	1.197	-	-	-	-
4	Interruptible	GJ/d	1.197	62,244	75	-	-
5	Space	GJ/d	0.011	22,396,680	253	16,392,326	185
6	Commodity (Customer Provides)	GJ	0.008	2,750,300	21	5,437,973	41
7	Commodity (Union Provides)	GJ	0.030	-	-	-	-
	Transportation (cents/m ³)						
	Demand						
8	First 28 150 m ³	10 ³ m ³ /d	31.9554	12,448	3,978	14,070	4,496
9	Next 112 720 m ³	10 ³ m ³ /d	22.0775	13,002	2,871	11,693	2,582
	Commodity						
10	Firm	10 ³ m ³	0.0712	485,700	346	428,990	305
11	Interruptible	10 ³ m ³	1.2341	63,286	781	37,605	464
12	Monthly Charges		\$ 1,936.13	528	1,022	533	1,032
13	Total Rate T1				10,345		10,150
	Rate T2						
	Storage (\$/GJ's)						
	Demand						
	Firm injection / withdrawal						
14	Union provides deliverability inventory	GJ/d	1.624	1,516,920	2,463	1,898,508	3,083
15	Customer provides deliverability inventory	GJ/d	1.197	1,336,556	1,600	879,000	1,052
16	Incremental firm injection right	GJ/d	1.197	-	-	22,800	27
17	Interruptible	GJ/d	1.197	415,704	498	180,000	215
18	Space	GJ/d	0.011	106,645,056	1,204	99,913,151	1,128
19	Commodity (Customer Provides)	GJ	0.008	7,869,782	60	32,274,504	245
20	Commodity (Union Provides)	GJ	0.030	-	-	-	-
	Transportation (cents/m ³)						
	Demand						
21	First 140 870 m ³	10 ³ m ³ /d	20.191	49,971	10,090	57,657	11,642
22	All Over 140 870 m ³	10 ³ m ³ /d	10.680	167,088	17,845	205,325	21,929
	Commodity						
23	Firm	10 ³ m ³	0.008	4,521,813	353	3,986,730	311
24	Interruptible	10 ³ m ³	0.945	358,485	3,387	114,706	1,084
25	Monthly Charges	Meter/mo.	\$ 6,000.00	444	2,664	468	2,808
26	Total Rate T2				40,164		43,525
	Rate T3						
	Storage (\$/GJ's)						
	Demand						
	Firm injection / withdrawal						
27	Union provides deliverability inventory	GJ/d	1.624	-	-	-	-
28	Customer provides deliverability inventory	GJ/d	1.197	679,320	813	649,668	778
29	Incremental firm injection right	GJ/d	1.197	-	-	-	-
30	Interruptible	GJ/d	1.197	-	-	-	-
31	Space	GJ/d	0.011	36,614,256	414	38,472,252	435
32	Commodity (Customer Provides)	GJ	0.008	4,459,672	34	4,978,135	38
33	Commodity (Union Provides)	GJ	0.030	-	-	-	-
	Transportation (cents/ m ³)						
34	Demand	10 ³ m ³ /d	9.358	28,200	2,639	28,200	2,639
35	Commodity	10 ³ m ³	0.011	272,712	29	279,794	30
36	Monthly Charges	Meter/mo.	\$ 20,371.35	12	244	12	244
37	Total Rate T3				4,173		4,163
38	Total Union South In-franchise				524,540		560,725

UNION RATE ZONES
Calculation of 2013 and 2018 Revenue at 2013 Approved Rates

Line No.	Particulars	Billing Units (a)	Rates (\$/GJ) (b)	2013		2018	
				Approved Usage (c)	Revenue (\$000's) (d)	Actual Usage (e)	Revenue (\$000's) (f)
	<u>Rate M12</u>						
	Demand						
1	Dawn to Kirkwall	GJ/d	2.011	8,708,176	17,509	1,409,148	2,833
2	Dawn to Kirkwall F24-T	GJ/d	0.068	594,000	40	594,000	40
3	Dawn to Parkway	GJ/d	2.382	43,052,600	102,570	54,856,774	130,692
4	Dawn to Parkway F24-T	GJ/d	0.068	4,711,848	319	5,718,273	387
5	Kirkwall to Parkway	GJ/d	0.372	1,411,468	525	5,053,860	1,879
6	M12-X Easterly & Westerly	GJ/d	2.961	4,692,132	13,896	4,752,132	14,073
7	Total Rate M12				<u>134,859</u>		<u>149,905</u>
	<u>Rate M13</u>						
8	Monthly Fixed Charge	monthly	\$ 926.60	15	167	13	141
9	Transmission Commodity Charge	GJ	0.034	5,934,507	200	2,791,231	94
10	Total Rate M13				<u>367</u>		<u>235</u>
	<u>Rate M16</u>						
11	Monthly Fixed Charge	monthly	\$ 1,474.12	4	71	3	53
12	Transmission Commodity Charge	GJ	0.034	6,236,394	211	5,922,163	200
13	Monthly Demand Charge - West of Dawn	GJ/d	1.059	214,154	227	214,154	227
14	Monthly Demand Charge - East of Dawn	GJ/d	0.741	108,800	81	-	-
15	Total Rate M16				<u>589</u>		<u>480</u>
	<u>Rate C1</u>						
	Storage Services						
16	Peak Storage (Short-term)	GJ			7,883		5,011
17	Balancing	GJ			2,000		1,583
18	Loans	GJ					15
19	Off Peak Storage	GJ			500		141
	Short-term Storage and Other Balancing Services						
20	Deferral Account Balance						1,413
	Transportation Services						
	Demand						
21	Ojibway to Dawn	GJ/d	1.059	1,025,520	1,197	695,316	737
22	St. Clair to Dawn	GJ/d	1.059		2,000	-	-
23	Parkway to Dawn	GJ/d	0.579	4,331,523	2,508	10,876,320	6,298
24	Kirkwall to Dawn	GJ/d	1.021	-	-	5,860,092	5,991
25	Bluewater to Dawn	GJ/d	1.059	-	-	615,000	651
26	Dawn to Parkway	GJ/d	2.382	84,780	413	540,360	1,287
27	Dawn to Dawn-Vector	GJ/d	0.029	1,114,140	32	1,114,140	32
28	Dawn to Dawn (TCPL)	GJ/d	0.134	6,000,000	805	6,000,000	805
29	Short-term Transportation	GJ			11,067		9,546
30	Exchanges				14,918		7,296
31	Ratepayer portion Exchange Revenue				(13,426)		(6,567)
32	Other Transactional				1,067		1,102
33	Total Rate C1				<u>30,963</u>		<u>35,342</u>
34	Total Ex-Franchise				<u>166,778</u>		<u>185,963</u>
35	Grand Total				<u>924,039</u>		<u>995,245</u>

SUMMARY
RETURN ON EQUITY & EARNINGS SHARING DETERMINATION
EGD RATE ZONE

ONTARIO UTILITY
FOR THE YEAR ENDED DECEMBER 31, 2018

Line No.	Col. 1 Description	Col. 2 Reference	Col. 3 Actual Normalized (\$millions) & (%'s)
1.	Part A) Return on Rate Base & Revenue (Deficiency) / Sufficiency		
2.	Gas Sales	(Ex.B,T2,App.E,S2,P1,Col.1,line 1)	2,498.8
3.	Transportation Revenue	(Ex.B,T2,App.E,S2,P1,Col.1,line 2)	276.3
4.	Transmission, Compr. and Storage Revenue	(Ex.B,T2,App.E,S2,P1,Col.1,line 3)	19.2
5.	Less Cost of Gas	(Ex.B,T2,App.E,S2,P1,Col.1,line 8)	1,566.0
6.	Gas Distribution Margin		1,228.3
7.	Other Revenue	(Ex.B,T2,App.E,S2,P1,Col.1,line 4)	42.3
8.	Other Income	(Ex.B,T2,App.E,S2,P1,Col.1,line 6)	0.2
9.	Total - Other Revenue & Income		42.5
10.	Operations & Maintenance (incl. CC/CIS rate smoothing adj.)	(Ex.B,T2,App.E,S2,P1,Col.1,line 9)	437.5
11.	Depreciation & amortization	(Ex.B,T2,App.E,S2,P1,Col.1,line 10)	294.7
12.	Fixed financing costs	(Ex.B,T2,App.E,S2,P1,Col.1,line 11)	2.2
13.	Municipal & capital taxes	(Ex.B,T2,App.E,S2,P1,Col.1,line 12)	44.9
14.	Total O&M, Depr., & other		779.3
15.	Utility Income before Income Tax	(line 5 + line 9 - line 14)	491.5
16.	Less: Income Taxes	(Ex.B,T2,App.E,S2,P1,Col.1,line 17)	38.8
17.	Utility Income		452.7
18.	Gross plant	(Ex.B,T2,App.B,S1,P1,Col.1,line 1)	9,594.5
19.	Accumulated depreciation	(Ex.B,T2,App.B,S1,P1,Col.1,line 2)	(3,277.9)
20.	Net plant		6,316.6
21.	Working capital	(Ex.B,T2,App.B,S1,P1,Col.1,line 11)	412.6
22.	Utility Rate Base		6,729.2
23.	Indicated Return on Rate Base %	(line 17 / line 22)	6.727%
24.	Less: Required Rate of Return %	(Ex.B,T2,App.E,S1,P1,Col.4,line 6)	6.073%
25.	(Deficiency) / Sufficiency %		0.654%
26.	Net Earnings (Deficiency) / Sufficiency	(line 25 x line 22)	44.01
27.	Provision for Income Taxes		15.87
28.	Gross Earnings (Deficiency) / Sufficiency	(line 26 divide by 73.5%)	59.88
29.	50% Earnings sharing to ratepayers	(line 28 x 50%)	29.94
30.	Part B) Return on Equity & Revenue (Deficiency) / Sufficiency		
31.	Utility Income before Income Tax	(Ex.B,T2,App.E,S2,P1,Col.1,line 16)	491.5
32.	Less: Long Term Debt Costs	(Ex.B,T2,App.E,S1,P1,Col.5,line 1)	181.2
33.	Less: Short Term Debt Costs	(Ex.B,T2,App.E,S1,P1,Col.5,line 2)	6.9
34.	Less: Cost of Preferred Capital	(Ex.B,T2,App.E,S1,P1,Col.5,line 4)	2.6
35.	Net Income before Income Taxes		300.8
36.	Less: Income Taxes	(Ex.B,T2,App.E,S2,P1,Col.1,line 17)	38.8
37.	Net Income Applicable to Common Equity	(line 35 - line 36)	262.0
38.	Common Equity	(Ex.B,T2,App.E,S1,P1,Col.1,line 5)	2,422.5
39.	Approved ROE %		9.000%
40.	Achieved Rate of Return on Equity %	(line 37 divide by line 38)	10.817%
41.	Resulting (Deficiency) / Sufficiency in Return on Equity %		1.817%
42.	Net Earnings (Deficiency) / Sufficiency	(line 38 x line 41)	44.01
43.	Provision for Income Taxes		15.87
44.	Gross Earnings (Deficiency) / Sufficiency	(line 42 divide by 73.5%)	59.88
45.	50% Earnings sharing to ratepayers	(line 44 x 50%)	29.94

UNION RATE ZONES
Earnings Sharing Calculation
Calendar Year Ending December 31, 2018

Line No.	Particulars (\$000s)	2018 (a)	Non-Utility Storage (b)	Adjustments (c)	2018 Utility (d)=(a)-(b)+(c)
	Operating Revenues				
1	Gas Sales	1,812,564	-	(19,447) i.	1,793,117
2	Transportation	258,512	(367)	-	258,879
3	Storage	151,772	143,609	-	8,163
4	Other	23,924	-	(6,119) ii	17,805
5		<u>2,246,773</u>	<u>143,242</u>	<u>(25,566)</u>	<u>2,077,965</u>
	Operating Expenses				
6	Cost of gas	960,481	36,499	(16,839) i.	907,143
7	Operating and maintenance expenses	461,872	13,451	(1,494) iii	446,928
8	Depreciation	287,543	10,676	-	276,867
9	Other financing	-	-	998 iv	998
10	Property and other taxes	77,786	1,489	-	76,297
11		<u>1,787,683</u>	<u>62,115</u>	<u>(17,335)</u>	<u>1,708,234</u>
	Other				
12	Gain / (Loss) on sale of assets	(1,803)	(1,824)	-	21
13	Other / Huron Tipperary	-	-	-	-
14	Gain / (Loss) on foreign exchange	3,028	2,282	493 v	1,239
15		<u>1,225</u>	<u>458</u>	<u>493</u>	<u>1,260</u>
16	Earnings before interest and taxes	<u>460,315</u>	<u>81,585</u>	<u>(7,738)</u>	370,991
17	Income taxes				(6,012)
18	Total utility income subject to earnings sharing				<u>377,002</u>
	Less debt and preference share return components				
19	Long-term debt				161,247
20	Unfunded short-term debt				3,226
21	Preferred dividend requirements				2,901
22					<u>167,374</u>
	Less shareholder portions of:				
23	Net short-term storage revenue (after tax)				256
24	Net optimization activity (after tax)				536
25					<u>793</u>
26	Earnings subject to sharing				<u>208,836</u>
27	Common equity				2,166,613
28	Return on equity (line 26 / line 27)				9.64%
29	Benchmark return on equity				9.93%
30	50% earnings sharing % (line 28 - line 29, maximum 1%)				0.00%
31	90% earnings sharing % (if line 30=1%, then line 28 - line 29 - line 30)				0.00%
32	50% earnings sharing \$ (line 27 x line 30 x 50%)				-
33	90% earnings sharing \$ (line 27 x line 31 x 90%)				<u>-</u>
34	Total earnings sharing \$ (line 32 + line 33)				<u>-</u>
35	Pre-tax earnings sharing (line 34 / (1 minus tax rate))				<u>-</u>
	Notes:				
i	Reclassification of optimization revenue as cost of gas		(16,839)		
	Reduction to revenue to reflect the impact of Bill C-97 (accelerated CCA), enacted June 21, 2019:				
	Impact captured in CPT deferral accounts		(314)		
	Ratepayer 50% of non-CPT CCA impact captured in Tax Variance		(940)		
	Elimination for shareholder 50% of non-CPT CCA impact		<u>(940)</u>		
	Total Asset CCA Impact		(2,194)		
	Elimination for shareholder 50% of HST tax variance impact		(413)		
	Total		<u>(19,447)</u>		
ii	Demand-side management incentive				
iii	Donations		2,547		
	CDM program		<u>(1,054)</u>		
			1,494		
iv	Facility fees and customer deposit interest				
v	Foreign exchange gain on bank balances				

30 Don River Replacement - ICM Project Revenue Requirement

Line No.	Particulars (\$000's)	2020 (a)	2021 (b)	2022 (c)	2023 (d)	Average Annual (5) (e)
	<u>Incremental Rate Base Investment</u>					
1	Capital Expenditures	26,793	-	-	-	
2	Average Rate Base	16,601	26,031	25,377	24,723	
	<u>Incremental Revenue Requirement Calculation:</u>					
	<u>Return on Incremental Rate Base: (1)</u>					
3	Long-term Debt Interest	482	757	738	719	674
4	Short-term Debt Interest	1	2	2	2	2
5	Preference Shares	7	11	11	11	10
6	Equity	538	843	822	801	751
7	Total Return on Incremental Rate Base	1,029	1,614	1,573	1,533	1,437
	<u>Incremental Operating Expenses:</u>					
8	Depreciation Expense (2)	436	654	654	654	599
9	Total Incremental Operating Expenses	436	654	654	654	599
	<u>Incremental Income Taxes:</u>					
10	Return on Equity and Preference Shares (line 5 + line 6)	545	855	833	812	761
	Utility Timing Differences					
11	Add: Depreciation Expense (line 8)	436	654	654	654	599
12	Less: Current Year Tax Deductions	(4,110)	(1,361)	(1,279)	(1,203)	(1,988)
13	Taxable Income (line 10 + line 11 + line 12)	(3,129)	147	208	263	(628)
14	Income Taxes Before Gross Up (line 13 x 26.5%) (3)	(829)	39	55	70	(166)
15	Total Incremental Income Taxes After Gross Up (line 14 / (1-26.5%) (3) (4)	(1,128)	53	75	95	(226)
16	Total Incremental Revenue Requirement (line 7 + line 9 + line 15)	337	2,321	2,302	2,281	1,810

Notes:

(1) The return on rate base is calculated based on EGD's 2018 Board-approved capital structure:

Capital Structure	Component %	Cost Rate	Return Component
Long-term Debt	61.84%	4.70%	2.91%
Short-term Debt	0.56%	1.60%	0.01%
Preference Shares	1.60%	2.72%	0.04%
Equity	36.00%	9.00%	3.24%
Total	100.00%		6.20%

(2) Depreciation expense at Board-approved depreciation rates.

(3) Enbridge Gas's current provincial and federal tax rate is equal to 26.5%.

(4) Incremental taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.

(5) Average annual revenue requirement calculated as the total revenue requirement from 2020 to 2023 recovered over the 48-month period from January 1, 2020 to December 31, 2023 expressed as an annual amount (12 months).

Windsor Line Replacement - ICM Project Revenue Requirement

Line No.	Particulars (\$000's)	2020 (a)	2021 (b)	2022 (c)	2023 (d)	Average Annual (5) (e)
	<u>Incremental Rate Base Investment</u>					
1	Capital Expenditures	80,448	-	-	-	
2	Average Rate Base	9,958	79,076	76,723	74,371	
	<u>Incremental Revenue Requirement Calculation:</u>					
	<u>Return on Incremental Rate Base: (1)</u>					
3	Long-term Debt Interest	399	3,165	3,071	2,977	2,403
4	Short-term Debt Interest	(0)	(0)	(0)	(0)	(0)
5	Preference Shares	8	66	64	62	50
6	Equity	320	2,542	2,467	2,391	1,930
7	Total Return on Incremental Rate Base	727	5,773	5,601	5,430	4,383
	<u>Incremental Operating Expenses:</u>					
8	Depreciation Expense (2)	196	2,352	2,352	2,352	1,813
9	Total Incremental Operating Expenses	196	2,352	2,352	2,352	1,813
	<u>Incremental Income Taxes:</u>					
10	Return on Equity and Preference Shares (line 5 + line 6)	328	2,608	2,531	2,453	1,980
	Utility Timing Differences					
11	Add: Depreciation Expense (line 8)	196	2,352	2,352	2,352	1,813
12	Less: Current Year Tax Deductions	(12,662)	(4,045)	(3,802)	(3,574)	(6,021)
13	Taxable Income (line 10 + line 11 + line 12)	(12,137)	916	1,081	1,231	(2,227)
14	Income Taxes Before Gross Up (line 13 x 26.5%) (3)	(3,216)	243	286	326	(590)
15	Total Incremental Income Taxes After Gross Up (line 14 / (1-26.5%) (3) (4)	(4,376)	330	390	444	(803)
16	Total Incremental Revenue Requirement (line 7 + line 9 + line 15)	(3,453)	8,456	8,343	8,226	5,393

Notes:

(1) The return on rate base is calculated based on Union's 2013 Board-approved capital structure:

Capital Structure	Component %	Cost Rate	Return Component
Long-term Debt	61.30%	6.53%	4.00%
Short-term Debt	-0.03%	1.31%	0.00%
Preference Shares	2.74%	3.05%	0.08%
Equity	36.00%	8.93%	3.21%
Total	100.00%		7.30%

(2) Depreciation expense at Board-approved depreciation rates.

(3) Enbridge Gas's current provincial and federal tax rate is equal to 26.5%.

(4) Incremental taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.

(5) Average annual revenue requirement calculated as the total revenue requirement from 2020 to 2023 recovered over the 48-month period from January 1, 2020 to December 31, 2023 expressed as an annual amount (12 months).

EGD Rate Zone
Allocation of 2020 ICM Project Revenue Requirement

Line No.	Particulars	Delivery Demand TP > 4" Allocator (1) %	Don River Replacement Project (2) (000's)
		(a)	(b)
	<u>EGD</u>		
1	Rate 1	46%	832
2	Rate 6	41%	738
3	Rate 9	0%	0
4	Rate 100	0%	1
5	Rate 110	3%	51
6	Rate 115	1%	20
7	Rate 125	8%	145
8	Rate 135	0%	0
9	Rate 145	0%	1
10	Rate 170	0%	2
11	Rate 200	1%	19
12	Rate 300	0%	0
13	Total	<u>100%</u>	<u>1,810</u>

Notes:

- (1) EGD extra high pressure mains greater than 4 inch diameter are allocated according to the Board approved cost allocation methodology (EB-2017-0086), Delivery Demand TP > 4 inch allocator, reflecting 2020 forecast peak demand by rate class
- (2) Exhibit B, Tab 2, Appendix E

UNION RATE ZONES
Allocation of Windsor Line Replacement Project Average Annual Revenue Requirement

Line No.	Particulars	Other Transmission Allocator (1) (10 ³ m ³ /d) (a)	Windsor Line Replacement Project (2) (\$000's) (b)
1	Rate 01	-	-
2	Rate 10	-	-
3	Rate 20	-	-
4	Rate 25	-	-
5	Rate 100	-	-
6	Total Union North	-	-
7	Rate M1	31,030	2,092
8	Rate M2	11,714	790
9	Rate M4 (F)	5,248	354
10	Rate M4 (I)	-	-
11	Rate M5 (F)	55	4
12	Rate M5 (I)	-	-
13	Rate M7 (F)	2,926	197
14	Rate M7 (I)	-	-
15	Rate M9	538	36
16	Rate M10	4	0
17	Rate T1 (F)	2,248	152
18	Rate T1 (I)	-	-
19	Rate T2 (F)	23,712	1,598
20	Rate T2 (I)	-	-
21	Rate T3	2,527	170
22	Total Union South	80,002	5,393
23	Excess Utility Storage	-	-
24	Rate C1 (F)	-	-
25	Rate C1 (I)	-	-
26	Rate M12	-	-
27	Rate M13	-	-
28	Rate M16	-	-
29	Total Ex-Franchise	-	-
30	Total Union Rate Zones	80,002	5,393 (3)

Notes:

- (1) Union South other transmission demand allocation in proportion to forecast 2020 Union South in-franchise design day demands.
- (2) Allocated in proportion to column (a).
- (3) Exhibit B, Tab 2, Appendix E, p. 2.

Derivation of 2020 Incremental Capital Module ("ICM") Rates by Rate Class

Line No.	Particulars	ICM Revenue Requirement (1) (000's) (a)	Forecast Volumes (10 ⁶ m ³) (b)	ICM Unit Rates (cents / m ³) (d) = (a / b * 100)
	<u>Bundled Services</u>			
1	Rate 1	832	4,934.0	0.0169
2	Rate 6	738	4,843.4	0.0152
3	Rate 9	0	0.0	0.0000
4	Rate 100 - per m ³ of contract demand	1	2.1	0.0719
5	Rate 110 - per m ³ of contract demand	51	54.6	0.0929
6	Rate 115 - per m ³ of contract demand	20	16.3	0.1233
7	Rate 135	0	62.8	0.0002
8	Rate 145 - per m ³ of contract demand	1	7.6	0.0190
9	Rate 170 - per m ³ of contract demand	2	28.7	0.0059
10	Rate 200 - per m ³ of contract demand	19	15.0	0.1280
	<u>Unbundled Services</u>			
11	Rate 125 - per m ³ of contract demand	145	111.1	0.1304
12	Rate 300 - per m ³ of contract demand	0	0.2	0.1304
13	Total 2020 ICM Costs	<u>1,810</u>		

Notes:

(1) Exhibit B, Tab 2. Appendix F, Page 1

UNION RATE ZONES
Derivation of 2020 Incremental Capital Module ("ICM") Rates by Rate Class

Line No.	Particulars	ICM Revenue Requirement (1) (\$000s) (a)	2020 Forecast Usage (b)	Billing Units (c)	2020 ICM Rate (2) (cents / m³) (d) = (a / b * 100)
	<u>Union South</u>				
	Rate M1 Small Volume General Service				
1	Monthly Delivery Commodity Charge	2,092	3,127,730	10³m³	0.0669
	Rate M2 Large Volume General Service				
2	Monthly Delivery Commodity Charge	790	1,324,290	10³m³	0.0596
	Rate M4 Firm Commercial/Industrial Contract Rate				
3	Monthly Demand Charge	354	47,514	10³m³/d	0.7446
	Rate M5A Interruptible Commercial/Industrial Contract Rate				
	Firm contracts				
4	Monthly Demand Charge	4	659	10³m³/d	0.5618
	Rate M7 Special Large Volume Contract Rate				
	Firm Contracts				
5	Monthly Demand Charge	197	36,050	10³m³/d	0.5472
	Rate M9 Large Wholesale Service				
6	Monthly Demand Charge	36	6,439	10³m³/d	0.5636
	Rate M10 Small Wholesale Service				
7	Monthly Delivery Commodity Charge	0	311	10³m³	0.0868
	Rate T1 Contract Carriage Service				
8	Monthly Demand Charge	152	26,330	10³m³/d	0.5755
	Rate T2 Contract Carriage Service				
9	Monthly Demand Charge	1,598	272,309	10³m³/d	0.5870
	Rate T3 Contract Carriage Service				
10	Monthly Demand Charge	170	28,200	10³m³/d	0.6041
11	Total Union South In-franchise	<u>5,393</u>			
12	Total Union In-franchise	<u>5,393</u>			

Notes:

- (1) Exhibit B, Tab 2, Appendix F, p. 2, column (b).
- (2) To be included in delivery and transportation rates.

ANNUAL BILL COMPARISON - RESIDENTIAL CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
			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	0.00%				4,691	4,691	0	0.00%
1.2	CUSTOMER CHG.	\$	245.87	245.87	0.00	0.00%				245.87	245.87	0.00	0.00%
1.3	DISTRIBUTION CHG.	\$	264.96	264.44	0.52	0.20%				399.51	398.72	0.79	0.20%
1.4	LOAD BALANCING	§ \$	168.22	168.22	0.00	0.00%				257.55	257.55	0.00	0.00%
1.5	SALES COMMDTY	\$	274.98	274.98	0.00	0.00%				421.00	421.00	0.00	0.00%
1.6	TOTAL SALES	\$	954.03	953.51	0.52	0.05%				1,323.92	1,323.13	0.79	0.06%
1.7	TOTAL T-SERVICE	\$	679.04	678.53	0.52	0.08%				902.92	902.13	0.79	0.09%
1.8	SALES UNIT RATE	\$/m³	0.3114	0.3112	0.0002	0.05%				0.2822	0.2821	0.0002	0.06%
1.9	T-SERVICE UNIT RATE	\$/m³	0.2216	0.2215	0.0002	0.08%				0.1925	0.1923	0.0002	0.09%
1.10	SALES UNIT RATE	\$/GJ	8.081	8.077	0.0044	0.05%				7.325	7.320	0.0044	0.06%
1.11	T-SERVICE UNIT RATE	\$/GJ	5.752	5.748	0.0044	0.08%				4.996	4.991	0.0044	0.09%
			Heating Only				Heating & Water Htg.						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
2.1	VOLUME	m³	1,955	1,955	0	0.00%				2,005	2,005	0	0.00%
2.2	CUSTOMER CHG.	\$	245.87	245.87	0.00	0.00%				245.87	245.87	0.00	0.00%
2.3	DISTRIBUTION CHG.	\$	169.93	169.60	0.33	0.19%				176.80	176.46	0.34	0.19%
2.4	LOAD BALANCING	§ \$	107.33	107.33	0.00	0.00%				110.08	110.08	0.00	0.00%
2.5	SALES COMMDTY	\$	175.45	175.45	0.00	0.00%				179.94	179.94	0.00	0.00%
2.6	TOTAL SALES	\$	698.58	698.25	0.33	0.05%				712.69	712.35	0.34	0.05%
2.7	TOTAL T-SERVICE	\$	523.13	522.80	0.33	0.06%				532.75	532.41	0.34	0.06%
2.8	SALES UNIT RATE	\$/m³	0.3573	0.3572	0.0002	0.05%				0.3555	0.3553	0.0002	0.05%
2.9	T-SERVICE UNIT RATE	\$/m³	0.2676	0.2674	0.0002	0.06%				0.2657	0.2655	0.0002	0.06%
2.10	SALES UNIT RATE	\$/GJ	9.274	9.270	0.0044	0.05%				9.225	9.221	0.0044	0.05%
2.11	T-SERVICE UNIT RATE	\$/GJ	6.945	6.940	0.0044	0.06%				6.896	6.892	0.0044	0.06%

§ The Load Balancing Charge shown here includes proposed transportation charges.

ANNUAL BILL COMPARISON - RESIDENTIAL CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		1,081	1,081	0	0.00%		
3.2	CUSTOMER CHG.	\$	245.87	245.87	0.00	0.00%		245.87	245.87	0.00	0.00%		
3.3	DISTRIBUTION CHG.	\$	429.65	428.80	0.85	0.20%		99.76	99.57	0.18	0.18%		
3.4	LOAD BALANCING	§ \$	277.15	277.15	0.00	0.00%		59.35	59.35	0.00	0.00%		
3.5	SALES COMMDTY	\$	453.04	453.04	0.00	0.00%		97.02	97.02	0.00	0.00%		
3.6	TOTAL SALES	\$	1,405.70	1,404.85	0.85	0.06%		501.99	501.81	0.18	0.04%		
3.7	TOTAL T-SERVICE	\$	952.66	951.81	0.85	0.09%		404.97	404.79	0.18	0.05%		
3.8	SALES UNIT RATE	\$/m³	0.2785	0.2783	0.0002	0.06%		0.4644	0.4642	0.0002	0.04%		
3.9	T-SERVICE UNIT RATE	\$/m³	0.1887	0.1886	0.0002	0.09%		0.3746	0.3745	0.0002	0.05%		
3.10	SALES UNIT RATE	\$/GJ	7.227	7.223	0.0044	0.06%		12.052	12.048	0.0044	0.04%		
3.11	T-SERVICE UNIT RATE	\$/GJ	4.898	4.894	0.0044	0.09%		9.723	9.719	0.0044	0.05%		
Heating & Water Htg.							Heating & Water Htg.						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
2.1	VOLUME	m³	2,480	2,480	0	0.00%		2,400	2,400	0	0.00%		
2.2	CUSTOMER CHG.	\$	245.87	245.87	0.00	0.00%		245.87	245.87	0.00	0.00%		
2.3	DISTRIBUTION CHG.	\$	216.32	215.90	0.42	0.19%		209.40	208.99	0.40	0.19%		
2.4	LOAD BALANCING	§ \$	136.16	136.16	0.00	0.00%		131.77	131.77	0.00	0.00%		
2.5	SALES COMMDTY	\$	222.57	222.57	0.00	0.00%		215.39	215.39	0.00	0.00%		
2.6	TOTAL SALES	\$	820.92	820.50	0.42	0.05%		802.42	802.01	0.40	0.05%		
2.7	TOTAL T-SERVICE	\$	598.35	597.93	0.42	0.07%		587.03	586.62	0.40	0.07%		
2.8	SALES UNIT RATE	\$/m³	0.3310	0.3308	0.0002	0.05%		0.3343	0.3342	0.0002	0.05%		
2.9	T-SERVICE UNIT RATE	\$/m³	0.2413	0.2411	0.0002	0.07%		0.2446	0.2444	0.0002	0.07%		
2.10	SALES UNIT RATE	\$/GJ	8.591	8.587	0.0044	0.05%		8.677	8.673	0.0044	0.05%		
2.11	T-SERVICE UNIT RATE	\$/GJ	6.262	6.257	0.0044	0.07%		6.348	6.344	0.0044	0.07%		

§ The Load Balancing Charge shown here includes proposed transportation charges.

ANNUAL BILL COMPARISON - COMMERCIAL & INDUSTRIAL CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
1.1	VOLUME	m³	22,606	22,606	0	0.00%	29,278	29,278	0	0.00%
1.2	CUSTOMER CHG.	\$	860.53	860.53	0.00	0.00%	860.53	860.53	0.00	0.00%
1.3	DISTRIBUTION CHG.	\$	1,548.86	1,545.42	3.44	0.22%	1,987.39	1,982.93	4.46	0.22%
1.4	LOAD BALANCING	§ \$	1,221.83	1,221.83	0.00	0.00%	1,582.44	1,582.44	0.00	0.00%
1.5	SALES COMMDTY	\$	2,033.73	2,033.73	0.00	0.00%	2,633.97	2,633.97	0.00	0.00%
1.6	TOTAL SALES	\$	5,664.95	5,661.51	3.44	0.06%	7,064.33	7,059.87	4.46	0.06%
1.7	TOTAL T-SERVICE	\$	3,631.22	3,627.78	3.44	0.09%	4,430.36	4,425.90	4.46	0.10%
1.8	SALES UNIT RATE	\$/m³	0.2506	0.2504	0.0002	0.06%	0.2413	0.2411	0.0002	0.06%
1.9	T-SERVICE UNIT RATE	\$/m³	0.1606	0.1605	0.0002	0.09%	0.1513	0.1512	0.0002	0.10%
1.10	SALES UNIT RATE	\$/GJ	6.504	6.500	0.0040	0.06%	6.262	6.258	0.0040	0.06%
1.11	T-SERVICE UNIT RATE	\$/GJ	4.169	4.165	0.0040	0.09%	3.927	3.923	0.0040	0.10%
Medium Commercial Customer							Large Commercial Customer			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
2.1	VOLUME	m³	169,563	169,563	0	0.00%	339,125	339,125	0	0.00%
2.2	CUSTOMER CHG.	\$	860.53	860.53	0.00	0.00%	860.53	860.53	0.00	0.00%
2.3	DISTRIBUTION CHG.	\$	8,361.06	8,335.23	25.83	0.31%	15,320.56	15,268.90	51.66	0.34%
2.4	LOAD BALANCING	§ \$	9,164.66	9,164.66	0.00	0.00%	18,329.27	18,329.27	0.00	0.00%
2.5	SALES COMMDTY	\$	15,254.61	15,254.61	0.00	0.00%	30,509.14	30,509.14	0.00	0.00%
2.6	TOTAL SALES	\$	33,640.87	33,615.04	25.83	0.08%	65,019.50	64,967.84	51.66	0.08%
2.7	TOTAL T-SERVICE	\$	18,386.26	18,360.43	25.83	0.14%	34,510.36	34,458.70	51.66	0.15%
2.8	SALES UNIT RATE	\$/m³	0.1984	0.1982	0.0002	0.08%	0.1917	0.1916	0.0002	0.08%
2.9	T-SERVICE UNIT RATE	\$/m³	0.1084	0.1083	0.0002	0.14%	0.1018	0.1016	0.0002	0.15%
2.10	SALES UNIT RATE	\$/GJ	5.149	5.145	0.0040	0.08%	4.976	4.972	0.0040	0.08%
2.11	T-SERVICE UNIT RATE	\$/GJ	2.814	2.810	0.0040	0.14%	2.641	2.637	0.0040	0.15%

§ The Load Balancing Charge shown here includes proposed transportation charges.

ANNUAL BILL COMPARISON - COMMERCIAL & INDUSTRIAL CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		63,903	63,903	0	0.00%		
3.2	CUSTOMER CHG.	\$	860.53	860.53	0.00	0.00%		860.53	860.53	0.00	0.00%		
3.3	DISTRIBUTION CHG.	\$	2,747.25	2,740.65	6.59	0.24%		3,687.07	3,677.33	9.73	0.26%		
3.4	LOAD BALANCING	§ \$	2,339.50	2,339.50	0.00	0.00%		3,453.88	3,453.88	0.00	0.00%		
3.5	SALES COMMDTY	\$	3,894.10	3,894.10	0.00	0.00%		5,748.99	5,748.99	0.00	0.00%		
3.6	TOTAL SALES	\$	9,841.39	9,834.79	6.59	0.07%		13,750.46	13,740.73	9.73	0.07%		
3.7	TOTAL T-SERVICE	\$	5,947.28	5,940.69	6.59	0.11%		8,001.48	7,991.74	9.73	0.12%		
3.8	SALES UNIT RATE	\$/m³	0.2274	0.2272	0.0002	0.07%		0.2152	0.2150	0.0002	0.07%		
3.9	T-SERVICE UNIT RATE	\$/m³	0.1374	0.1372	0.0002	0.11%		0.1252	0.1251	0.0002	0.12%		
3.10	SALES UNIT RATE	\$/GJ	5.901	5.897	0.0040	0.07%		5.585	5.581	0.0040	0.07%		
3.11	T-SERVICE UNIT RATE	\$/GJ	3.566	3.562	0.0040	0.11%		3.250	3.246	0.0040	0.12%		
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	0.00%		339,124	339,124	0	0.00%		
4.2	CUSTOMER CHG.	\$	860.53	860.53	0.00	0.00%		860.53	860.53	0.00	0.00%		
4.3	DISTRIBUTION CHG.	\$	8,560.42	8,534.59	25.83	0.30%		15,468.89	15,417.23	51.66	0.34%		
4.4	LOAD BALANCING	§ \$	9,164.66	9,164.66	0.00	0.00%		18,329.22	18,329.22	0.00	0.00%		
4.5	SALES COMMDTY	\$	15,254.61	15,254.61	0.00	0.00%		30,509.05	30,509.05	0.00	0.00%		
4.6	TOTAL SALES	\$	33,840.24	33,814.41	25.83	0.08%		65,167.69	65,116.03	51.66	0.08%		
4.7	TOTAL T-SERVICE	\$	18,585.62	18,559.79	25.83	0.14%		34,658.64	34,606.98	51.66	0.15%		
4.8	SALES UNIT RATE	\$/m³	0.1996	0.1994	0.0002	0.08%		0.1922	0.1920	0.0002	0.08%		
4.9	T-SERVICE UNIT RATE	\$/m³	0.1096	0.1095	0.0002	0.14%		0.1022	0.1020	0.0002	0.15%		
4.10	SALES UNIT RATE	\$/GJ	5.180	5.176	0.0040	0.08%		4.987	4.983	0.0040	0.08%		
4.11	T-SERVICE UNIT RATE	\$/GJ	2.845	2.841	0.0040	0.14%		2.652	2.649	0.0040	0.15%		

§ The Load Balancing Charge shown here includes proposed transportation charges.

ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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)	%				
1.1	VOLUME	m³	339,188	339,188	0	0.00%	598,567	598,567	0	0.00%
1.2	CUSTOMER CHG.	\$	1,499.91	1,499.91	0.00	0.00%	1,499.91	1,499.91	0.00	0.00%
1.3	DISTRIBUTION CHG.	\$	13,864.16	13,838.32	25.84	0.19%	67,559.11	67,429.63	129.48	0.19%
1.4	LOAD BALANCING	\$	18,333.80	18,333.80	0.00	0.00%	32,353.77	32,353.77	0.00	0.00%
1.5	SALES COMMDTY	\$	30,514.80	30,514.80	0.00	0.00%	53,849.64	53,849.64	0.00	0.00%
1.6	TOTAL SALES	\$	64,212.67	64,186.84	25.84	0.04%	155,262.43	155,132.95	129.48	0.08%
1.7	TOTAL T-SERVICE	\$	33,697.87	33,672.03	25.84	0.08%	101,412.79	101,283.31	129.48	0.13%
1.8	SALES UNIT RATE	\$/m³	0.1893	0.1892	0.0001	0.04%	0.2594	0.2592	0.0002	0.08%
1.9	T-SERVICE UNIT RATE	\$/m³	0.0993	0.0993	0.0001	0.08%	0.1694	0.1692	0.0002	0.13%
1.10	SALES UNIT RATE	\$/GJ	4.913	4.911	0.0020	0.04%	6.732	6.727	0.0056	0.08%
1.11	T-SERVICE UNIT RATE	\$/GJ	2.578	2.576	0.0020	0.08%	4.397	4.392	0.0056	0.13%
Rate 100 - Large Industrial Firm										
			(A)	(B)	CHANGE					
					(A) - (B)	%				
2.1	VOLUME	m³	1,500,000	1,500,000	0	0.00%				
2.2	CUSTOMER CHG.	\$	1,499.91	1,499.91	0.00	0.00%				
2.3	DISTRIBUTION CHG.	\$	135,647.27	135,388.30	258.96	0.19%				
2.4	LOAD BALANCING	\$	81,078.05	81,078.05	0.00	0.00%				
2.5	SALES COMMDTY	\$	134,946.41	134,946.41	0.00	0.00%				
2.6	TOTAL SALES	\$	353,171.64	352,912.68	258.96	0.07%				
2.7	TOTAL T-SERVICE	\$	218,225.23	217,966.27	258.96	0.12%				
2.8	SALES UNIT RATE	\$/m³	0.2354	0.2353	0.0002	0.07%				
2.9	T-SERVICE UNIT RATE	\$/m³	0.1455	0.1453	0.0002	0.12%				
2.10	SALES UNIT RATE	\$/GJ	6.111	6.106	0.0045	0.07%				
2.11	T-SERVICE UNIT RATE	\$/GJ	3.776	3.771	0.0045	0.12%				

ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		598,568	598,568	0	0.00%
3.2	CUSTOMER CHG.	\$	1,516.26	1,516.26	0.00	0.00%		1,516.26	1,516.26	0.00	0.00%
3.3	DISTRIBUTION CHG.	\$	12,529.22	12,522.39	6.83	0.05%		19,003.33	18,993.08	10.25	0.05%
3.4	LOAD BALANCING	\$	14,385.58	14,385.58	0.00	0.00%		25,386.71	25,386.71	0.00	0.00%
3.5	SALES COMMDTY	\$	30,332.38	30,332.38	0.00	0.00%		53,527.82	53,527.82	0.00	0.00%
3.6	TOTAL SALES	\$	58,763.45	58,756.62	6.83	0.01%		99,434.13	99,423.88	10.25	0.01%
3.7	TOTAL T-SERVICE	\$	28,431.07	28,424.23	6.83	0.02%		45,906.31	45,896.06	10.25	0.02%
3.8	SALES UNIT RATE	\$/m³	0.1732	0.1732	0.0000	0.01%		0.1661	0.1661	0.0000	0.01%
3.9	T-SERVICE UNIT RATE	\$/m³	0.0838	0.0838	0.0000	0.02%		0.0767	0.0767	0.0000	0.02%
3.10	SALES UNIT RATE	\$/GJ	4.496	4.496	0.0005	0.01%		4.311	4.311	0.0004	0.01%
3.11	T-SERVICE UNIT RATE	\$/GJ	2.175	2.175	0.0005	0.02%		1.990	1.990	0.0004	0.02%

NOTE: Curtailment notice based on 72-hour period.

NOTE: Curtailment notice based on 16-hour period.

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	0.00%		598,567	598,567	0	0.00%	
4.2	CUSTOMER CHG.	\$	1,516.26	1,516.26	0.00	0.00%		1,516.26	1,516.26	0.00	0.00%	
4.3	DISTRIBUTION CHG.	\$	12,805.01	12,798.18	6.83	0.05%		19,247.48	19,237.23	10.25	0.05%	
4.4	LOAD BALANCING	\$	14,385.58	14,385.58	0.00	0.00%		25,386.66	25,386.66	0.00	0.00%	
4.5	SALES COMMDTY	\$	30,332.38	30,332.38	0.00	0.00%		53,527.73	53,527.73	0.00	0.00%	
4.6	TOTAL SALES	\$	59,039.24	59,032.41	6.83	0.01%		99,678.14	99,667.89	10.25	0.01%	
4.7	TOTAL T-SERVICE	\$	28,706.86	28,700.03	6.83	0.02%		46,150.41	46,140.16	10.25	0.02%	
4.8	SALES UNIT RATE	\$/m³	0.1741	0.1740	0.0000	0.01%		0.1665	0.1665	0.0000	0.01%	
4.9	T-SERVICE UNIT RATE	\$/m³	0.0846	0.0846	0.0000	0.02%		0.0771	0.0771	0.0000	0.02%	
4.10	SALES UNIT RATE	\$/GJ	4.518	4.517	0.0005	0.01%		4.322	4.322	0.0004	0.01%	
4.11	T-SERVICE UNIT RATE	\$/GJ	2.197	2.196	0.0005	0.02%		2.001	2.001	0.0004	0.02%	

NOTE: Curtailment notice based on 72-hour period.

NOTE: Curtailment notice based on 16-hour period.

ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		9,976,121	9,976,121	0	0.00%	
5.2	CUSTOMER CHG.	\$	7,220.74	7,220.74	0.00	0.00%		7,220.74	7,220.74	0.00	0.00%	
5.3	DISTRIBUTION CHG.	\$	14,301.43	14,264.75	36.68	0.26%		234,466.81	233,866.54	600.28	0.26%	
5.4	LOAD BALANCING	\$	26,902.27	26,902.27	0.00	0.00%		448,370.60	448,370.60	0.00	0.00%	
5.5	SALES COMMDTY	\$	53,505.74	53,505.74	0.00	0.00%		891,761.28	891,761.28	0.00	0.00%	
5.6	TOTAL SALES	\$	101,930.19	101,893.51	36.68	0.04%		1,581,819.44	1,581,219.16	600.28	0.04%	
5.7	TOTAL T-SERVICE	\$	48,424.45	48,387.76	36.68	0.08%		690,058.16	689,457.88	600.28	0.09%	
5.8	SALES UNIT RATE	\$/m³	0.1703	0.1702	0.0001	0.04%		0.1586	0.1585	0.0001	0.04%	
5.9	T-SERVICE UNIT RATE	\$/m³	0.0809	0.0808	0.0001	0.08%		0.0692	0.0691	0.0001	0.09%	
5.10	SALES UNIT RATE	\$/GJ	4.420	4.418	0.0016	0.04%		4.115	4.114	0.0016	0.04%	
5.11	T-SERVICE UNIT RATE	\$/GJ	2.100	2.098	0.0016	0.08%		1.795	1.794	0.0016	0.09%	
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	0.00%		69,832,850	69,832,850	0	0.00%	
6.2	CUSTOMER CHG.	\$	7,220.74	7,220.74	0.00	0.00%		7,654.08	7,654.08	0.00	0.00%	
6.3	DISTRIBUTION CHG.	\$	186,178.5	185,772.7	405.75	0.22%		981,139.9	977,603.4	3,536.48	0.36%	
6.4	LOAD BALANCING	\$	448,370.56	448,370.56	0.00	0.00%		3,037,151.20	3,037,151.20	0.00	0.00%	
6.5	SALES COMMDTY	\$	891,761.19	891,761.19	0.00	0.00%		6,242,301.26	6,242,301.26	0.00	0.00%	
6.6	TOTAL SALES	\$	1,533,530.96	1,533,125.21	405.75	0.03%		10,268,246.41	10,264,709.93	3,536.48	0.03%	
6.7	TOTAL T-SERVICE	\$	641,769.77	641,364.02	405.75	0.06%		4,025,945.16	4,022,408.67	3,536.48	0.09%	
6.8	SALES UNIT RATE	\$/m³	0.1537	0.1537	0.0000	0.03%		0.1470	0.1470	0.0001	0.03%	
6.9	T-SERVICE UNIT RATE	\$/m³	0.0643	0.0643	0.0000	0.06%		0.0577	0.0576	0.0001	0.09%	
6.10	SALES UNIT RATE	\$/GJ	3.990	3.989	0.0011	0.03%		3.816	3.815	0.0013	0.03%	
6.11	T-SERVICE UNIT RATE	\$/GJ	1.670	1.669	0.0011	0.06%		1.496	1.495	0.0013	0.09%	

ANNUAL BILL COMPARISON - LARGE VOLUME CUSTOMERS

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	598,567.00	598,567.00	0	0.00%		9,976,121	9,976,121	0	0.00%
7.2	CUSTOMER CHG.	\$	1,414.72	1,414.72	0.00	0.00%		3,433.65	3,433.65	0.00	0.00%
7.3	DISTRIBUTION CHG.	\$	10,897.64	10,896.72	0.92	0.01%		79,873.20	79,835.18	38.02	0.05%
7.4	LOAD BALANCING	\$	20,451.30	20,451.30	0.00	0.00%		327,588.67	327,588.67	0.00	0.00%
7.5	SALES COMMDTY	\$	53,548.58	53,548.58	0.00	0.00%		891,761.27	891,761.27	0.00	0.00%
7.6	TOTAL SALES	\$	86,312.24	86,311.32	0.92	0.00%		1,302,656.79	1,302,618.77	38.02	0.00%
7.7	TOTAL T-SERVICE	\$	32,763.66	32,762.74	0.92	0.00%		410,895.52	410,857.50	38.02	0.01%
7.8	SALES UNIT RATE	\$/m³	0.1442	0.1442	0.0000	0.00%		0.1306	0.1306	0.0000	0.00%
7.9	T-SERVICE UNIT RATE	\$/m³	0.0547	0.0547	0.0000	0.00%		0.0412	0.0412	0.0000	0.01%
7.10	SALES UNIT RATE	\$/GJ	3.742	3.742	0.0000	0.00%		3.389	3.389	0.0001	0.00%
7.11	T-SERVICE UNIT RATE	\$/GJ	1.421	1.421	0.0000	0.00%		1.069	1.069	0.0001	0.01%
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	0.00%		69,832,850	69,832,850	0	0.00%
8.2	CUSTOMER CHG.	\$	3,433.65	3,433.65	0.00	0.00%		3,433.65	3,433.65	0.00	0.00%
8.3	DISTRIBUTION CHG.	\$	72,488.08	72,462.38	25.70	0.04%		390,051.59	389,871.56	180.03	0.05%
8.4	LOAD BALANCING	\$	327,588.63	327,588.63	0.00	0.00%		2,293,120.77	2,293,120.77	0.00	0.00%
8.5	SALES COMMDTY	\$	891,761.18	891,761.18	0.00	0.00%		6,242,329.17	6,242,329.17	0.00	0.00%
8.6	TOTAL SALES	\$	1,295,271.55	1,295,245.85	25.70	0.00%		8,928,935.19	8,928,755.16	180.03	0.00%
8.7	TOTAL T-SERVICE	\$	403,510.37	403,484.67	25.70	0.01%		2,686,606.01	2,686,425.98	180.03	0.01%
8.8	SALES UNIT RATE	\$/m³	0.1298	0.1298	0.0000	0.00%		0.1279	0.1279	0.0000	0.00%
8.9	T-SERVICE UNIT RATE	\$/m³	0.0404	0.0404	0.0000	0.01%		0.0385	0.0385	0.0000	0.01%
8.10	SALES UNIT RATE	\$/GJ	3.370	3.370	0.0001	0.00%		3.318	3.318	0.0001	0.00%
8.11	T-SERVICE UNIT RATE	\$/GJ	1.050	1.050	0.0001	0.01%		0.998	0.998	0.0001	0.01%

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8
			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	0.00%		4,691	4,691	0	0.00%
1.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%		257.87	257.87	0.00	0.00%
1.3	DISTRIBUTION CHG.	\$	265.07	264.55	0.52	0.20%		399.68	398.88	0.79	0.20%
1.4	LOAD BALANCING	§ \$	168.22	168.22	0.00	0.00%		257.55	257.55	0.00	0.00%
1.5	SALES COMMDTY	\$	274.98	274.98	0.00	0.00%		421.00	421.00	0.00	0.00%
1.6	FEDERAL CARBON CHARGE	\$	119.80	119.80	0.00	0.00%		183.42	183.42	0.00	0.00%
1.7	TOTAL SALES	\$	1,085.94	1,085.42	0.52	0.05%		1,519.51	1,518.72	0.79	0.05%
1.8	TOTAL T-SERVICE	\$	810.96	810.44	0.52	0.06%		1,098.51	1,097.72	0.79	0.07%
1.9	SALES UNIT RATE	\$/m³	0.3544	0.3542	0.0002	0.05%		0.3239	0.3238	0.0002	0.05%
1.10	T-SERVICE UNIT RATE	\$/m³	0.2647	0.2645	0.0002	0.06%		0.2342	0.2340	0.0002	0.07%
1.11	SALES UNIT RATE	\$/GJ	9.2248	9.2205	0.0044	0.05%		8.4310	8.4266	0.0044	0.05%
1.12	T-SERVICE UNIT RATE	\$/GJ	6.8889	6.8845	0.0044	0.06%		6.0951	6.0907	0.0044	0.07%
			Heating Only				Heating & Water Htg.				
			(A)	(B)	CHANGE			(A)	(B)	CHANGE	
					(A) - (B)	%				(A) - (B)	%
2.1	VOLUME	m³	1,955	1,955	0	0.00%		2,005	2,005	0	0.00%
2.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%		257.87	257.87	0.00	0.00%
2.3	DISTRIBUTION CHG.	\$	170.00	169.67	0.33	0.19%		176.87	176.54	0.34	0.19%
2.4	LOAD BALANCING	§ \$	107.33	107.33	0.00	0.00%		110.08	110.08	0.00	0.00%
2.5	SALES COMMDTY	\$	175.45	175.45	0.00	0.00%		179.94	179.94	0.00	0.00%
2.6	FEDERAL CARBON CHARGE	\$	76.44	76.44	0.00	0.00%		78.40	78.40	0.00	0.00%
2.7	TOTAL SALES	\$	787.10	786.77	0.33	0.04%		803.16	802.82	0.34	0.04%
2.8	TOTAL T-SERVICE	\$	611.64	611.31	0.33	0.05%		623.22	622.88	0.34	0.05%
2.9	SALES UNIT RATE	\$/m³	0.4026	0.4024	0.0002	0.04%		0.4006	0.4004	0.0002	0.04%
2.10	T-SERVICE UNIT RATE	\$/m³	0.3129	0.3127	0.0002	0.05%		0.3108	0.3107	0.0002	0.05%
2.11	SALES UNIT RATE	\$/GJ	10.4791	10.4747	0.0044	0.04%		10.4263	10.4219	0.0044	0.04%
2.12	T-SERVICE UNIT RATE	\$/GJ	8.1432	8.1388	0.0044	0.05%		8.0904	8.0860	0.0044	0.05%

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	m ³	5,048	5,048	0	0.00%	1,081	1,081	0	0.00%
3.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%	257.87	257.87	0.00	0.00%
3.3	DISTRIBUTION CHG.	\$	429.83	428.98	0.85	0.20%	99.79	99.61	0.18	0.18%
3.4	LOAD BALANCING	§ \$	277.15	277.15	0.00	0.00%	59.35	59.35	0.00	0.00%
3.5	SALES COMMDTY	\$	453.04	453.04	0.00	0.00%	97.02	97.02	0.00	0.00%
	FEDERAL CARBON CHARGE	\$	197.38	197.38	0.00	0.00%	42.27	42.27	0.00	0.00%
3.6	TOTAL SALES	\$	1,615.26	1,614.41	0.85	0.05%	556.29	556.11	0.18	0.03%
3.7	TOTAL T-SERVICE	\$	1,162.22	1,161.37	0.85	0.07%	459.28	459.10	0.18	0.04%
3.8	SALES UNIT RATE	\$/m ³	0.3200	0.3198	0.0002	0.05%	0.5146	0.5144	0.0002	0.03%
3.90	T-SERVICE UNIT RATE	\$/m ³	0.2302	0.2301	0.0002	0.07%	0.4249	0.4247	0.0002	0.04%
3.10	SALES UNIT RATE	\$/GJ	8.3285	8.3241	0.0044	0.05%	13.3943	13.3899	0.0044	0.03%
3.11	T-SERVICE UNIT RATE	\$/GJ	5.9926	5.9882	0.0044	0.07%	11.0584	11.0540	0.0044	0.04%
			Heating & Water Htg.				Heating & Water Htg.			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
4.1	VOLUME	m ³	2,480	2,480	0	0.00%	2,400	2,400	0	0.00%
4.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%	257.87	257.87	0.00	0.00%
4.3	DISTRIBUTION CHG.	\$	216.41	215.99	0.42	0.19%	209.48	209.08	0.40	0.19%
4.4	LOAD BALANCING	§ \$	136.16	136.16	0.00	0.00%	131.77	131.77	0.00	0.00%
4.5	SALES COMMDTY	\$	222.57	222.57	0.00	0.00%	215.39	215.39	0.00	0.00%
4.6	FEDERAL CARBON CHARGE	\$	96.97	96.97	0.00	0.00%	93.84	93.84	0.00	0.00%
4.7	TOTAL SALES	\$	929.97	929.56	0.42	0.05%	908.35	907.94	0.40	0.04%
4.8	TOTAL T-SERVICE	\$	707.40	706.98	0.42	0.06%	692.95	692.55	0.40	0.06%
4.9	SALES UNIT RATE	\$/m ³	0.3750	0.3748	0.0002	0.05%	0.3785	0.3783	0.0002	0.04%
4.10	T-SERVICE UNIT RATE	\$/m ³	0.2852	0.2851	0.0002	0.06%	0.2887	0.2886	0.0002	0.06%
4.11	SALES UNIT RATE	\$/GJ	9.7603	9.7559	0.0044	0.05%	9.8510	9.8467	0.0044	0.04%
4.12	T-SERVICE UNIT RATE	\$/GJ	7.4243	7.4200	0.0044	0.06%	7.5151	7.5107	0.0044	0.06%

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
1.1	VOLUME	m ³	22,606	22,606	0	0.00%	29,278	29,278	0	0.00%
1.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%	872.53	872.53	0.00	0.00%
1.3	DISTRIBUTION CHG.	\$	1,549.67	1,546.23	3.44	0.22%	1,988.44	1,983.98	4.46	0.22%
1.4	LOAD BALANCING	§ \$	1,221.83	1,221.83	0.00	0.00%	1,582.44	1,582.44	0.00	0.00%
1.5	SALES COMMDTY	\$	2,033.73	2,033.73	0.00	0.00%	2,633.97	2,633.97	0.00	0.00%
1.6	FEDERAL CARBON CHARGE	\$	883.89	883.89	0.00	0.00%	1,144.77	1,144.77	0.00	0.00%
1.7	TOTAL SALES	\$	6,561.66	6,558.22	3.44	0.05%	8,222.16	8,217.70	4.46	0.05%
1.8	TOTAL T-SERVICE	\$	4,527.93	4,524.48	3.44	0.08%	5,588.18	5,583.72	4.46	0.08%
1.9	SALES UNIT RATE	\$/m ³	0.2903	0.2901	0.0002	0.05%	0.2808	0.2807	0.0002	0.05%
1.10	T-SERVICE UNIT RATE	\$/m ³	0.2003	0.2001	0.0002	0.08%	0.1909	0.1907	0.0002	0.08%
1.11	SALES UNIT RATE	\$/GJ	7.5550	7.5510	0.0040	0.05%	7.3095	7.3055	0.0040	0.05%
1.12	T-SERVICE UNIT RATE	\$/GJ	5.2134	5.2094	0.0040	0.08%	4.9679	4.9639	0.0040	0.08%
			Medium Commercial Customer				Large Commercial Customer			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
2.1	VOLUME	m ³	169,563	169,563	0	0.00%	339,125	339,125	0	0.00%
2.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%	872.53	872.53	0.00	0.00%
2.3	DISTRIBUTION CHG.	\$	8,367.17	8,341.34	25.83	0.31%	15,332.76	15,281.11	51.66	0.34%
2.4	LOAD BALANCING	§ \$	9,164.66	9,164.66	0.00	0.00%	18,329.27	18,329.27	0.00	0.00%
2.5	SALES COMMDTY	\$	15,254.61	15,254.61	0.00	0.00%	30,509.14	30,509.14	0.00	0.00%
2.6	FEDERAL CARBON CHARGE	\$	6,629.91	6,629.91	0.00	0.00%	13,259.79	13,259.79	0.00	0.00%
2.7	TOTAL SALES	\$	40,288.89	40,263.06	25.83	0.06%	78,303.50	78,251.84	51.66	0.07%
2.8	TOTAL T-SERVICE	\$	25,034.28	25,008.45	25.83	0.10%	47,794.36	47,742.70	51.66	0.11%
2.9	SALES UNIT RATE	\$/m ³	0.2376	0.2375	0.0002	0.06%	0.2309	0.2307	0.0002	0.07%
2.10	T-SERVICE UNIT RATE	\$/m ³	0.1476	0.1475	0.0002	0.10%	0.1409	0.1408	0.0002	0.11%
2.11	SALES UNIT RATE	\$/GJ	6.1844	6.1804	0.0040	0.06%	6.0099	6.0059	0.0040	0.07%
2.12	T-SERVICE UNIT RATE	\$/GJ	3.8428	3.8388	0.0040	0.10%	3.6683	3.6643	0.0040	0.11%

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		63,903	63,903	0	0.00%		
3.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%		872.53	872.53	0.00	0.00%		
3.3	DISTRIBUTION CHG.	\$	2,748.81	2,742.21	6.59	0.24%		3,689.37	3,679.63	9.73	0.26%		
3.4	LOAD BALANCING	§ \$	2,339.50	2,339.50	0.00	0.00%		3,453.88	3,453.88	0.00	0.00%		
3.5	SALES COMMDTY	\$	3,894.10	3,894.10	0.00	0.00%		5,748.99	5,748.99	0.00	0.00%		
	FEDERAL CARBON CHARGE	\$	1,692.44	1,692.44	0.00	0.00%		2,498.61	2,498.61	0.00	0.00%		
3.6	TOTAL SALES	\$	11,547.39	11,540.79	6.59	0.06%		16,263.37	16,253.64	9.73	0.06%		
3.7	TOTAL T-SERVICE	\$	7,653.28	7,646.69	6.59	0.09%		10,514.38	10,504.65	9.73	0.09%		
3.8	SALES UNIT RATE	\$/m³	0.2668	0.2666	0.0002	0.06%		0.2545	0.2543	0.0002	0.06%		
3.90	T-SERVICE UNIT RATE	\$/m³	0.1768	0.1767	0.0002	0.09%		0.1645	0.1644	0.0002	0.09%		
3.10	SALES UNIT RATE	\$/GJ	6.9437	6.9397	0.0040	0.06%		6.6242	6.6202	0.0040	0.06%		
3.11	T-SERVICE UNIT RATE	\$/GJ	4.6021	4.5981	0.0040	0.09%		4.2826	4.2786	0.0040	0.09%		
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	0.00%		339,124	339,124	0	0.00%		
4.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%		872.53	872.53	0.00	0.00%		
4.3	DISTRIBUTION CHG.	\$	8,566.53	8,540.70	25.83	0.30%		15,481.10	15,429.44	51.66	0.33%		
4.4	LOAD BALANCING	§ \$	9,164.66	9,164.66	0.00	0.00%		18,329.22	18,329.22	0.00	0.00%		
4.5	SALES COMMDTY	\$	15,254.61	15,254.61	0.00	0.00%		30,509.05	30,509.05	0.00	0.00%		
4.6	FEDERAL CARBON CHARGE	\$	6,629.91	6,629.91	0.00	0.00%		13,259.75	13,259.75	0.00	0.00%		
4.7	TOTAL SALES	\$	40,488.25	40,462.42	25.83	0.06%		78,451.65	78,399.99	51.66	0.07%		
4.8	TOTAL T-SERVICE	\$	25,233.64	25,207.81	25.83	0.10%		47,942.60	47,890.94	51.66	0.11%		
4.9	SALES UNIT RATE	\$/m³	0.2388	0.2386	0.0002	0.06%		0.2313	0.2312	0.0002	0.07%		
4.10	T-SERVICE UNIT RATE	\$/m³	0.1488	0.1487	0.0002	0.10%		0.1414	0.1412	0.0002	0.11%		
4.11	SALES UNIT RATE	\$/GJ	6.2150	6.2110	0.0040	0.06%		6.0212	6.0173	0.0040	0.07%		
4.12	T-SERVICE UNIT RATE	\$/GJ	3.8734	3.8694	0.0040	0.10%		3.6796	3.6757	0.0040	0.11%		

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		598,567	598,567	0	0.00%	
1.2	CUSTOMER CHG.	\$	1,511.91	1,511.91	0.00	0.00%		1,511.91	1,511.91	0.00	0.00%	
1.3	DISTRIBUTION CHG.	\$	13,876.37	13,850.53	25.84	0.19%		67,580.66	67,451.18	129.48	0.19%	
1.4	LOAD BALANCING	\$	18,333.80	18,333.80	0.00	0.00%		32,353.77	32,353.77	0.00	0.00%	
1.5	SALES COMMDTY	\$	30,514.80	30,514.80	0.00	0.00%		53,849.64	53,849.64	0.00	0.00%	
1.6	FEDERAL CARBON CHARGE	\$	13,262.25	13,262.25	0.00	0.00%		23,403.97	23,403.97	0.00	0.00%	
1.7	TOTAL SALES	\$	77,499.13	77,473.30	25.84	0.03%		178,699.95	178,570.47	129.48	0.07%	
1.8	TOTAL T-SERVICE	\$	46,984.33	46,958.50	25.84	0.06%		124,850.31	124,720.83	129.48	0.10%	
1.9	SALES UNIT RATE	\$/m³	0.2285	0.2284	0.0001	0.03%		0.2985	0.2983	0.0002	0.07%	
1.10	T-SERVICE UNIT RATE	\$/m³	0.1385	0.1384	0.0001	0.06%		0.2086	0.2084	0.0002	0.10%	
1.11	SALES UNIT RATE	\$/GJ	5.9470	5.9450	0.0020	0.03%		7.7706	7.7650	0.0056	0.07%	
1.12	T-SERVICE UNIT RATE	\$/GJ	3.6054	3.6034	0.0020	0.06%		5.4290	5.4234	0.0056	0.10%	
Rate 100 - Large Industrial Firm												
			(A)	(B)	CHANGE							
					(A) - (B)	%						
2.1	VOLUME	m³	1,500,000	1,500,000	0	0.00%						
2.2	CUSTOMER CHG.	\$	1,511.91	1,511.91	0.00	0.00%						
2.3	DISTRIBUTION CHG.	\$	135,701.27	135,442.30	258.96	0.19%						
2.4	LOAD BALANCING	\$	81,078.05	81,078.05	0.00	0.00%						
2.5	SALES COMMDTY	\$	134,946.41	134,946.41	0.00	0.00%						
2.6	FEDERAL CARBON CHARGE	\$	58,650.00	58,650.00	0.00	0.00%						
2.7	TOTAL SALES	\$	411,887.64	411,628.68	258.96	0.06%						
2.8	TOTAL T-SERVICE	\$	276,941.23	276,682.27	258.96	0.09%						
2.9	SALES UNIT RATE	\$/m³	0.2746	0.2744	0.0002	0.06%						
2.10	T-SERVICE UNIT RATE	\$/m³	0.1846	0.1845	0.0002	0.09%						
2.11	SALES UNIT RATE	\$/GJ	7.1471	7.1426	0.0045	0.06%						
2.12	T-SERVICE UNIT RATE	\$/GJ	4.8055	4.8010	0.0045	0.09%						

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		598,568	598,568	0	0.00%		
3.2	CUSTOMER CHG.	\$	1,528.26	1,528.26	0.00	0.00%		1,528.26	1,528.26	0.00	0.00%		
3.3	DISTRIBUTION CHG.	\$	12,541.43	12,534.60	6.83	0.05%		19,024.88	19,014.63	10.25	0.05%		
3.4	LOAD BALANCING	\$	14,385.58	14,385.58	0.00	0.00%		25,386.71	25,386.71	0.00	0.00%		
3.5	SALES COMMDTY	\$	30,332.38	30,332.38	0.00	0.00%		53,527.82	53,527.82	0.00	0.00%		
	FEDERAL CARBON CHARGE	\$	13,262.25	13,262.25	0.00	0.00%		23,404.01	23,404.01	0.00	0.00%		
3.6	TOTAL SALES	\$	72,049.91	72,043.08	6.83	0.01%		122,871.69	122,861.44	10.25	0.01%		
3.7	TOTAL T-SERVICE	\$	41,717.53	41,710.70	6.83	0.02%		69,343.86	69,333.61	10.25	0.01%		
3.8	SALES UNIT RATE	\$/m³	0.2124	0.2124	0.0000	0.01%		0.2053	0.2053	0.0000	0.01%		
3.90	T-SERVICE UNIT RATE	\$/m³	0.1230	0.1230	0.0000	0.02%		0.1158	0.1158	0.0000	0.01%		
3.10	SALES UNIT RATE	\$/GJ	5.5289	5.5283	0.0005	0.01%		5.3429	5.3425	0.0004	0.01%		
3.11	T-SERVICE UNIT RATE	\$/GJ	3.2013	3.2007	0.0005	0.02%		3.0153	3.0149	0.0004	0.01%		
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	0.00%		598,567	598,567	0	0.00%		
4.2	CUSTOMER CHG.	\$	1,528.26	1,528.26	0.00	0.00%		1,528.26	1,528.26	0.00	0.00%		
4.3	DISTRIBUTION CHG.	\$	12,817.22	12,810.39	6.83	0.05%		19,269.03	19,258.78	10.25	0.05%		
4.4	LOAD BALANCING	\$	14,385.58	14,385.58	0.00	0.00%		25,386.66	25,386.66	0.00	0.00%		
4.5	SALES COMMDTY	\$	30,332.38	30,332.38	0.00	0.00%		53,527.73	53,527.73	0.00	0.00%		
4.6	FEDERAL CARBON CHARGE	\$	13,262.25	13,262.25	0.00	0.00%		23,403.97	23,403.97	0.00	0.00%		
4.7	TOTAL SALES	\$	72,325.71	72,318.87	6.83	0.01%		123,115.66	123,105.41	10.25	0.01%		
4.8	TOTAL T-SERVICE	\$	41,993.32	41,986.49	6.83	0.02%		69,587.93	69,577.68	10.25	0.01%		
4.9	SALES UNIT RATE	\$/m³	0.2132	0.2132	0.0000	0.01%		0.2057	0.2057	0.0000	0.01%		
4.10	T-SERVICE UNIT RATE	\$/m³	0.1238	0.1238	0.0000	0.02%		0.1163	0.1162	0.0000	0.01%		
4.11	SALES UNIT RATE	\$/GJ	5.5500	5.5495	0.0005	0.01%		5.3536	5.3531	0.0004	0.01%		
4.12	T-SERVICE UNIT RATE	\$/GJ	3.2224	3.2219	0.0005	0.02%		3.0260	3.0255	0.0004	0.01%		

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		9,976,121	9,976,121	0	0.00%		
5.2	CUSTOMER CHG.	\$	7,232.74	7,232.74	0.00	0.00%		7,232.74	7,232.74	0.00	0.00%		
5.3	DISTRIBUTION CHG.	\$	14,322.98	14,286.30	36.68	0.26%		234,825.95	234,225.68	600.28	0.26%		
5.4	LOAD BALANCING	\$	26,902.27	26,902.27	0.00	0.00%		448,370.60	448,370.60	0.00	0.00%		
5.5	SALES COMMDTY	\$	53,505.74	53,505.74	0.00	0.00%		891,761.28	891,761.28	0.00	0.00%		
5.6	FEDERAL CARBON CHARGE	\$	23,404.01	23,404.01	0.00	0.00%		390,066.33	390,066.33	0.00	0.00%		
5.7	TOTAL SALES	\$	125,367.75	125,331.06	36.68	0.03%		1,972,256.91	1,971,656.63	600.28	0.03%		
5.8	TOTAL T-SERVICE	\$	71,862.00	71,825.32	36.68	0.05%		1,080,495.63	1,079,895.35	600.28	0.06%		
5.9	SALES UNIT RATE	\$/m³	0.2094	0.2094	0.0001	0.03%		0.1977	0.1976	0.0001	0.03%		
5.10	T-SERVICE UNIT RATE	\$/m³	0.1201	0.1200	0.0001	0.05%		0.1083	0.1082	0.0001	0.06%		
5.11	SALES UNIT RATE	\$/GJ	5.4515	5.4499	0.0016	0.03%		5.1457	5.1441	0.0016	0.03%		
5.12	T-SERVICE UNIT RATE	\$/GJ	3.1248	3.1232	0.0016	0.05%		2.8191	2.8175	0.0016	0.06%		
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	0.00%		69,832,850	69,832,850	0	0.00%		
6.2	CUSTOMER CHG.	\$	7,232.74	7,232.74	0.00	0.00%		7,666.08	7,666.08	0.00	0.00%		
6.3	DISTRIBUTION CHG.	\$	186,537.61	186,131.86	405.75	0.22%		983,653.86	980,117.38	3,536.48	0.36%		
6.4	LOAD BALANCING	\$	448,370.56	448,370.56	0.00	0.00%		3,037,151.20	3,037,151.20	0.00	0.00%		
6.5	SALES COMMDTY	\$	891,761.19	891,761.19	0.00	0.00%		6,242,301.26	6,242,301.26	0.00	0.00%		
6.6	FEDERAL CARBON CHARGE	\$	390,066.29	390,066.29	0.00	0.00%		2,730,464.44	2,730,464.44	0.00	0.00%		
6.7	TOTAL SALES	\$	1,923,968.39	1,923,562.64	405.75	0.02%		13,001,236.83	12,997,700.35	3,536.48	0.03%		
6.8	TOTAL T-SERVICE	\$	1,032,207.20	1,031,801.45	405.75	0.04%		6,758,935.57	6,755,399.09	3,536.48	0.05%		
6.9	SALES UNIT RATE	\$/m³	0.1929	0.1928	0.0000	0.02%		0.1862	0.1861	0.0001	0.03%		
6.10	T-SERVICE UNIT RATE	\$/m³	0.1035	0.1034	0.0000	0.04%		0.0968	0.0967	0.0001	0.05%		
6.11	SALES UNIT RATE	\$/GJ	5.0197	5.0187	0.0011	0.02%		4.8458	4.8445	0.0013	0.03%		
6.12	T-SERVICE UNIT RATE	\$/GJ	2.6931	2.6920	0.0011	0.04%		2.5192	2.5179	0.0013	0.05%		

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%		9,976,121	9,976,121	0	0.00%		
7.2	CUSTOMER CHG.	\$	1,426.72	1,426.72	0.00	0.00%		3,445.65	3,445.65	0.00	0.00%		
7.3	DISTRIBUTION CHG.	\$	10,919.19	10,918.27	0.92	0.01%		80,232.34	80,194.32	38.02	0.05%		
7.4	LOAD BALANCING	\$	20,451.30	20,451.30	0.00	0.00%		327,588.67	327,588.67	0.00	0.00%		
7.5	SALES COMMDTY	\$	53,548.58	53,548.58	0.00	0.00%		891,761.27	891,761.27	0.00	0.00%		
7.6	FEDERAL CARBON CHARGE	\$	23,403.97	23,403.97	0.00	0.00%		390,066.33	390,066.33	0.00	0.00%		
7.7	TOTAL SALES	\$	109,749.76	109,748.84	0.92	0.00%		1,693,094.26	1,693,056.24	38.02	0.00%		
7.8	TOTAL T-SERVICE	\$	56,201.17	56,200.26	0.92	0.00%		801,332.99	801,294.97	38.02	0.00%		
7.9	SALES UNIT RATE	\$/m³	0.1834	0.1834	0.0000	0.00%		0.1697	0.1697	0.0000	0.00%		
7.10	T-SERVICE UNIT RATE	\$/m³	0.0939	0.0939	0.0000	0.00%		0.0803	0.0803	0.0000	0.00%		
7.11	SALES UNIT RATE	\$/GJ	4.7724	4.7723	0.0000	0.00%		4.4174	4.4173	0.0001	0.00%		
7.12	T-SERVICE UNIT RATE	\$/GJ	2.4439	2.4438	0.0000	0.00%		2.0907	2.0906	0.0001	0.00%		
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	0.00%		69,832,850	69,832,850	0	0.00%		
8.2	CUSTOMER CHG.	\$	3,445.65	3,445.65	0.00	0.00%		3,445.65	3,445.65	0.00	0.00%		
8.3	DISTRIBUTION CHG.	\$	72,847.22	72,821.52	25.70	0.04%		392,565.58	392,385.54	180.03	0.05%		
8.4	LOAD BALANCING	\$	327,588.63	327,588.63	0.00	0.00%		2,293,120.77	2,293,120.77	0.00	0.00%		
8.5	SALES COMMDTY	\$	891,761.18	891,761.18	0.00	0.00%		6,242,329.17	6,242,329.17	0.00	0.00%		
8.6	FEDERAL CARBON CHARGE	\$	390,066.29	390,066.29	0.00	0.00%		2,730,464.44	2,730,464.44	0.00	0.00%		
8.7	TOTAL SALES	\$	1,685,708.99	1,685,683.29	25.70	0.00%		11,661,925.60	11,661,745.57	180.03	0.00%		
8.8	TOTAL T-SERVICE	\$	793,947.80	793,922.10	25.70	0.00%		5,419,596.43	5,419,416.40	180.03	0.00%		
8.9	SALES UNIT RATE	\$/m³	0.1690	0.1690	0.0000	0.00%		0.1670	0.1670	0.0000	0.00%		
8.10	T-SERVICE UNIT RATE	\$/m³	0.0796	0.0796	0.0000	0.00%		0.0776	0.0776	0.0000	0.00%		
8.11	SALES UNIT RATE	\$/GJ	4.3981	4.3980	0.0001	0.00%		4.3466	4.3466	0.0001	0.00%		
8.12	T-SERVICE UNIT RATE	\$/GJ	2.0714	2.0714	0.0001	0.00%		2.0200	2.0199	0.0001	0.00%		

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

Item No.			Col. 1	Col. 2	Col. 3	Col. 4		Col. 5	Col. 6	Col. 7	Col. 8		
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	0.00%		4,691	4,691	0	0.00%		
1.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%		257.87	257.87	0.00	0.00%		
1.3	DISTRIBUTION CHG.	\$	265.07	264.55	0.52	0.20%		399.68	398.88	0.79	0.20%		
1.4	LOAD BALANCING	§ \$	168.22	168.22	0.00	0.00%		257.55	257.55	0.00	0.00%		
1.5	SALES COMMDTY	\$	274.98	274.98	0.00	0.00%		421.00	421.00	0.00	0.00%		
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	\$	966.14	965.62	0.52	0.05%		1,336.09	1,335.30	0.79	0.06%		
1.8	TOTAL T-SERVICE	\$	691.15	690.64	0.52	0.07%		915.09	914.30	0.79	0.09%		
1.9	SALES UNIT RATE	\$/m³	0.3153	0.3151	0.0002	0.05%		0.2848	0.2847	0.0002	0.06%		
1.10	T-SERVICE UNIT RATE	\$/m³	0.2256	0.2254	0.0002	0.07%		0.1951	0.1949	0.0002	0.09%		
1.11	SALES UNIT RATE	\$/GJ	8.207	8.203	0.0044	0.05%		7.413	7.409	0.0044	0.06%		
1.12	T-SERVICE UNIT RATE	\$/GJ	5.871	5.867	0.0044	0.07%		5.077	5.073	0.0044	0.09%		
Heating Only							Heating & Water Htg.						
			(A)	(B)	CHANGE					(A)	(B)	CHANGE	
					(A) - (B)	%						(A) - (B)	%
2.1	VOLUME	m³	1,955	1,955	0	0.00%		2,005	2,005	0	0.00%		
2.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%		257.87	257.87	0.00	0.00%		
2.3	DISTRIBUTION CHG.	\$	170.00	169.67	0.33	0.19%		176.87	176.54	0.34	0.19%		
2.4	LOAD BALANCING	§ \$	107.33	107.33	0.00	0.00%		110.08	110.08	0.00	0.00%		
2.5	SALES COMMDTY	\$	175.45	175.45	0.00	0.00%		179.94	179.94	0.00	0.00%		
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	\$	710.65	710.32	0.33	0.05%		724.76	724.42	0.34	0.05%		
2.8	TOTAL T-SERVICE	\$	535.20	534.87	0.33	0.06%		544.82	544.48	0.34	0.06%		
2.9	SALES UNIT RATE	\$/m³	0.3635	0.3633	0.0002	0.05%		0.3615	0.3613	0.0002	0.05%		
2.10	T-SERVICE UNIT RATE	\$/m³	0.2738	0.2736	0.0002	0.06%		0.2717	0.2716	0.0002	0.06%		
2.11	SALES UNIT RATE	\$/GJ	9.461	9.457	0.0044	0.05%		9.409	9.404	0.0044	0.05%		
2.12	T-SERVICE UNIT RATE	\$/GJ	7.125	7.121	0.0044	0.06%		7.073	7.068	0.0044	0.06%		

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%	1,081	1,081	0	0.00%
3.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%	257.87	257.87	0.00	0.00%
3.3	DISTRIBUTION CHG.	\$	429.83	428.98	0.85	0.20%	99.79	99.61	0.18	0.18%
3.4	LOAD BALANCING	\$	277.15	277.15	0.00	0.00%	59.35	59.35	0.00	0.00%
3.5	SALES COMMDTY	\$	453.04	453.04	0.00	0.00%	97.02	97.02	0.00	0.00%
	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
3.6	TOTAL SALES	\$	1,417.88	1,417.03	0.85	0.06%	514.03	513.84	0.18	0.04%
3.7	TOTAL T-SERVICE	\$	964.85	964.00	0.85	0.09%	417.01	416.83	0.18	0.04%
3.8	SALES UNIT RATE	\$/m³	0.2809	0.2807	0.0002	0.06%	0.4755	0.4753	0.0002	0.04%
3.90	T-SERVICE UNIT RATE	\$/m³	0.1911	0.1910	0.0002	0.09%	0.3858	0.3856	0.0002	0.04%
3.10	SALES UNIT RATE	\$/GJ	7.311	7.306	0.0044	0.06%	12.377	12.372	0.0044	0.04%
3.11	T-SERVICE UNIT RATE	\$/GJ	4.975	4.970	0.0044	0.09%	10.041	10.036	0.0044	0.04%

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	0.00%	2,400	2,400	0	0.00%
4.2	CUSTOMER CHG.	\$	257.87	257.87	0.00	0.00%	257.87	257.87	0.00	0.00%
4.3	DISTRIBUTION CHG.	\$	216.41	215.99	0.42	0.19%	209.48	209.08	0.40	0.19%
4.4	LOAD BALANCING	\$	136.16	136.16	0.00	0.00%	131.77	131.77	0.00	0.00%
4.5	SALES COMMDTY	\$	222.57	222.57	0.00	0.00%	215.39	215.39	0.00	0.00%
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	\$	833.01	832.59	0.42	0.05%	814.51	814.10	0.40	0.05%
4.8	TOTAL T-SERVICE	\$	610.44	610.02	0.42	0.07%	599.11	598.71	0.40	0.07%
4.9	SALES UNIT RATE	\$/m³	0.3359	0.3357	0.0002	0.05%	0.3394	0.3392	0.0002	0.05%
4.10	T-SERVICE UNIT RATE	\$/m³	0.2461	0.2460	0.0002	0.07%	0.2496	0.2495	0.0002	0.07%
4.11	SALES UNIT RATE	\$/GJ	8.743	8.738	0.0044	0.05%	8.833	8.829	0.0044	0.05%
4.12	T-SERVICE UNIT RATE	\$/GJ	6.407	6.402	0.0044	0.07%	6.497	6.493	0.0044	0.07%

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
1.1	VOLUME	m³	22,606	22,606	0	0.00%	29,278	29,278	0	0.00%
1.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%	872.53	872.53	0.00	0.00%
1.3	DISTRIBUTION CHG.	\$	1,549.67	1,546.23	3.44	0.22%	1,988.44	1,983.98	4.46	0.22%
1.4	LOAD BALANCING	§ \$	1,221.83	1,221.83	0.00	0.00%	1,582.44	1,582.44	0.00	0.00%
1.5	SALES COMMDTY	\$	2,033.73	2,033.73	0.00	0.00%	2,633.97	2,633.97	0.00	0.00%
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	\$	5,677.77	5,674.32	3.44	0.06%	7,077.39	7,072.93	4.46	0.06%
1.8	TOTAL T-SERVICE	\$	3,644.03	3,640.59	3.44	0.09%	4,443.41	4,438.95	4.46	0.10%
1.9	SALES UNIT RATE	\$/m³	0.2512	0.2510	0.0002	0.06%	0.2417	0.2416	0.0002	0.06%
1.10	T-SERVICE UNIT RATE	\$/m³	0.1612	0.1610	0.0002	0.09%	0.1518	0.1516	0.0002	0.10%
1.11	SALES UNIT RATE	\$/GJ	6.537	6.533	0.0040	0.06%	6.292	6.288	0.0040	0.06%
1.12	T-SERVICE UNIT RATE	\$/GJ	4.196	4.192	0.0040	0.09%	3.950	3.946	0.0040	0.10%
Medium Commercial Customer							Large Commercial Customer			
			(A)	(B)	CHANGE		(A)	(B)	CHANGE	
					(A) - (B)	%			(A) - (B)	%
2.1	VOLUME	m³	169,563	169,563	0	0.00%	339,125	339,125	0	0.00%
2.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%	872.53	872.53	0.00	0.00%
2.3	DISTRIBUTION CHG.	\$	8,367.17	8,341.34	25.83	0.31%	15,332.76	15,281.11	51.66	0.34%
2.4	LOAD BALANCING	§ \$	9,164.66	9,164.66	0.00	0.00%	18,329.27	18,329.27	0.00	0.00%
2.5	SALES COMMDTY	\$	15,254.61	15,254.61	0.00	0.00%	30,509.14	30,509.14	0.00	0.00%
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	\$	33,658.98	33,633.15	25.83	0.08%	65,043.71	64,992.05	51.66	0.08%
2.8	TOTAL T-SERVICE	\$	18,404.36	18,378.53	25.83	0.14%	34,534.57	34,482.91	51.66	0.15%
2.9	SALES UNIT RATE	\$/m³	0.1985	0.1984	0.0002	0.08%	0.1918	0.1916	0.0002	0.08%
2.10	T-SERVICE UNIT RATE	\$/m³	0.1085	0.1084	0.0002	0.14%	0.1018	0.1017	0.0002	0.15%
2.11	SALES UNIT RATE	\$/GJ	5.167	5.163	0.0040	0.08%	4.992	4.988	0.0040	0.08%
2.12	T-SERVICE UNIT RATE	\$/GJ	2.825	2.821	0.0040	0.14%	2.651	2.647	0.0040	0.15%

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%	63,903	63,903	0	0.00%
3.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%	872.53	872.53	0.00	0.00%
3.3	DISTRIBUTION CHG.	\$	2,748.81	2,742.21	6.59	0.24%	3,689.37	3,679.63	9.73	0.26%
3.4	LOAD BALANCING	§ \$	2,339.50	2,339.50	0.00	0.00%	3,453.88	3,453.88	0.00	0.00%
3.5	SALES COMMDTY	\$	3,894.10	3,894.10	0.00	0.00%	5,748.99	5,748.99	0.00	0.00%
	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
3.6	TOTAL SALES	\$	9,854.94	9,848.35	6.59	0.07%	13,764.76	13,755.03	9.73	0.07%
3.7	TOTAL T-SERVICE	\$	5,960.84	5,954.25	6.59	0.11%	8,015.78	8,006.04	9.73	0.12%
3.8	SALES UNIT RATE	\$/m³	0.2277	0.2275	0.0002	0.07%	0.2154	0.2152	0.0002	0.07%
3.90	T-SERVICE UNIT RATE	\$/m³	0.1377	0.1376	0.0002	0.11%	0.1254	0.1253	0.0002	0.12%
3.10	SALES UNIT RATE	\$/GJ	5.926	5.922	0.0040	0.07%	5.606	5.603	0.0040	0.07%
3.11	T-SERVICE UNIT RATE	\$/GJ	3.584	3.580	0.0040	0.11%	3.265	3.261	0.0040	0.12%
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	0.00%	339,124	339,124	0	0.00%
4.2	CUSTOMER CHG.	\$	872.53	872.53	0.00	0.00%	872.53	872.53	0.00	0.00%
4.3	DISTRIBUTION CHG.	\$	8,566.53	8,540.70	25.83	0.30%	15,481.10	15,429.44	51.66	0.33%
4.4	LOAD BALANCING	§ \$	9,164.66	9,164.66	0.00	0.00%	18,329.22	18,329.22	0.00	0.00%
4.5	SALES COMMDTY	\$	15,254.61	15,254.61	0.00	0.00%	30,509.05	30,509.05	0.00	0.00%
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	\$	33,858.34	33,832.51	25.83	0.08%	65,191.90	65,140.24	51.66	0.08%
4.8	TOTAL T-SERVICE	\$	18,603.73	18,577.90	25.83	0.14%	34,682.85	34,631.19	51.66	0.15%
4.9	SALES UNIT RATE	\$/m³	0.1997	0.1995	0.0002	0.08%	0.1922	0.1921	0.0002	0.08%
4.10	T-SERVICE UNIT RATE	\$/m³	0.1097	0.1096	0.0002	0.14%	0.1023	0.1021	0.0002	0.15%
4.11	SALES UNIT RATE	\$/GJ	5.197	5.193	0.0040	0.08%	5.004	5.000	0.0040	0.08%
4.12	T-SERVICE UNIT RATE	\$/GJ	2.856	2.852	0.0040	0.14%	2.662	2.658	0.0040	0.15%

§ The Load Balancing Charge shown here includes proposed transportation charges

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	m ³	339,188	339,188	0	0.00%	598,567	598,567	0	0.00%
1.2	CUSTOMER CHG.	\$	1,511.91	1,511.91	0.00	0.00%	1,511.91	1,511.91	0.00	0.00%
1.3	DISTRIBUTION CHG.	\$	13,876.37	13,850.53	25.84	0.19%	67,580.66	67,451.18	129.48	0.19%
1.4	LOAD BALANCING	\$	18,333.80	18,333.80	0.00	0.00%	32,353.77	32,353.77	0.00	0.00%
1.5	SALES COMMDTY	\$	30,514.80	30,514.80	0.00	0.00%	53,849.64	53,849.64	0.00	0.00%
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	\$	64,236.88	64,211.05	25.84	0.04%	155,295.98	155,166.50	129.48	0.08%
1.8	TOTAL T-SERVICE	\$	33,722.08	33,696.24	25.84	0.08%	101,446.34	101,316.86	129.48	0.13%
1.9	SALES UNIT RATE	\$/m ³	0.1894	0.1893	0.0001	0.04%	0.2594	0.2592	0.0002	0.08%
1.10	T-SERVICE UNIT RATE	\$/m ³	0.0994	0.0993	0.0001	0.08%	0.1695	0.1693	0.0002	0.13%
1.11	SALES UNIT RATE	\$/GJ	4.929	4.927	0.0020	0.04%	6.753	6.747	0.0056	0.08%
1.12	T-SERVICE UNIT RATE	\$/GJ	2.588	2.586	0.0020	0.08%	4.411	4.406	0.0056	0.13%
			Rate 100 - Large Industrial Firm							
			(A)	(B)	CHANGE					
					(A) - (B)	%				
2.1	VOLUME	m ³	1,500,000	1,500,000	0	0.00%				
2.2	CUSTOMER CHG.	\$	1,511.91	1,511.91	0.00	0.00%				
2.3	DISTRIBUTION CHG.	\$	135,701.27	135,442.30	258.96	0.19%				
2.4	LOAD BALANCING	\$	81,078.05	81,078.05	0.00	0.00%				
2.5	SALES COMMDTY	\$	134,946.41	134,946.41	0.00	0.00%				
2.6	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%				
2.7	TOTAL SALES	\$	353,237.64	352,978.68	258.96	0.07%				
2.8	TOTAL T-SERVICE	\$	218,291.23	218,032.27	258.96	0.12%				
2.9	SALES UNIT RATE	\$/m ³	0.2355	0.2353	0.0002	0.07%				
2.10	T-SERVICE UNIT RATE	\$/m ³	0.1455	0.1454	0.0002	0.12%				
2.11	SALES UNIT RATE	\$/GJ	6.129	6.125	0.0045	0.07%				
2.12	T-SERVICE UNIT RATE	\$/GJ	3.788	3.783	0.0045	0.12%				

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	0.00%	598,568	598,568	0	0.00%
3.2	CUSTOMER CHG.	\$	1,528.26	1,528.26	0.00	0.00%	1,528.26	1,528.26	0.00	0.00%
3.3	DISTRIBUTION CHG.	\$	12,541.43	12,534.60	6.83	0.05%	19,024.88	19,014.63	10.25	0.05%
3.4	LOAD BALANCING	\$	14,385.58	14,385.58	0.00	0.00%	25,386.71	25,386.71	0.00	0.00%
3.5	SALES COMMDTY	\$	30,332.38	30,332.38	0.00	0.00%	53,527.82	53,527.82	0.00	0.00%
	FEDERAL CARBON CHARGE	\$	0.00	0.00	0.00	0.0%	0.00	0.00	0.00	0.0%
3.6	TOTAL SALES	\$	58,787.66	58,780.83	6.83	0.01%	99,467.68	99,457.43	10.25	0.01%
3.7	TOTAL T-SERVICE	\$	28,455.28	28,448.44	6.83	0.02%	45,939.86	45,929.61	10.25	0.02%
3.8	SALES UNIT RATE	\$/m³	0.1733	0.1733	0.0000	0.01%	0.1662	0.1662	0.0000	0.01%
3.90	T-SERVICE UNIT RATE	\$/m³	0.0839	0.0839	0.0000	0.02%	0.0767	0.0767	0.0000	0.02%
3.10	SALES UNIT RATE	\$/GJ	4.511	4.511	0.0005	0.01%	4.325	4.325	0.0004	0.01%
3.11	T-SERVICE UNIT RATE	\$/GJ	2.184	2.183	0.0005	0.02%	1.998	1.997	0.0004	0.02%
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	0.00%	598,567	598,567	0	0.00%
4.2	CUSTOMER CHG.	\$	1,528.26	1,528.26	0.00	0.00%	1,528.26	1,528.26	0.00	0.00%
4.3	DISTRIBUTION CHG.	\$	12,817.22	12,810.39	6.83	0.05%	19,269.03	19,258.78	10.25	0.05%
4.4	LOAD BALANCING	\$	14,385.58	14,385.58	0.00	0.00%	25,386.66	25,386.66	0.00	0.00%
4.5	SALES COMMDTY	\$	30,332.38	30,332.38	0.00	0.00%	53,527.73	53,527.73	0.00	0.00%
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	\$	59,063.46	59,056.62	6.83	0.01%	99,711.69	99,701.44	10.25	0.01%
4.8	TOTAL T-SERVICE	\$	28,731.07	28,724.24	6.83	0.02%	46,183.96	46,173.71	10.25	0.02%
4.9	SALES UNIT RATE	\$/m³	0.1741	0.1741	0.0000	0.01%	0.1666	0.1666	0.0000	0.01%
4.10	T-SERVICE UNIT RATE	\$/m³	0.0847	0.0847	0.0000	0.02%	0.0772	0.0771	0.0000	0.02%
4.11	SALES UNIT RATE	\$/GJ	4.532	4.532	0.0005	0.01%	4.336	4.335	0.0004	0.01%
4.12	T-SERVICE UNIT RATE	\$/GJ	2.205	2.204	0.0005	0.02%	2.008	2.008	0.0004	0.02%

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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	m ³	598,568	598,568	0	0.00%	9,976,121	9,976,121	0	0.00%
5.2 CUSTOMER CHG.	\$	7,232.74	7,232.74	0.00	0.00%	7,232.74	7,232.74	0.00	0.00%
5.3 DISTRIBUTION CHG.	\$	14,322.98	14,286.30	36.68	0.26%	234,825.95	234,225.68	600.28	0.26%
5.4 LOAD BALANCING	\$	26,902.27	26,902.27	0.00	0.00%	448,370.60	448,370.60	0.00	0.00%
5.5 SALES COMMDTY	\$	53,505.74	53,505.74	0.00	0.00%	891,761.28	891,761.28	0.00	0.00%
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	\$	101,963.74	101,927.05	36.68	0.04%	1,582,190.58	1,581,590.30	600.28	0.04%
5.8 TOTAL T-SERVICE	\$	48,457.99	48,421.31	36.68	0.08%	690,429.30	689,829.02	600.28	0.09%
5.9 SALES UNIT RATE	\$/m ³	0.1703	0.1703	0.0001	0.04%	0.1586	0.1585	0.0001	0.04%
### T-SERVICE UNIT RATE	\$/m ³	0.0810	0.0809	0.0001	0.08%	0.0692	0.0691	0.0001	0.09%
### SALES UNIT RATE	\$/GJ	4.434	4.432	0.0016	0.04%	4.128	4.126	0.0016	0.04%
### T-SERVICE UNIT RATE	\$/GJ	2.107	2.106	0.0016	0.08%	1.801	1.800	0.0016	0.09%
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	m ³	9,976,120	9,976,120	0	0.00%	69,832,850	69,832,850	0	0.00%
6.2 CUSTOMER CHG.	\$	7,232.74	7,232.74	0.00	0.00%	7,666.08	7,666.08	0.00	0.00%
6.3 DISTRIBUTION CHG.	\$	186,537.61	186,131.86	405.75	0.22%	983,653.86	980,117.38	3,536.48	0.36%
6.4 LOAD BALANCING	\$	448,370.56	448,370.56	0.00	0.00%	3,037,151.20	3,037,151.20	0.00	0.00%
6.5 SALES COMMDTY	\$	891,761.19	891,761.19	0.00	0.00%	6,242,301.26	6,242,301.26	0.00	0.00%
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	\$	1,533,902.10	1,533,496.35	405.75	0.03%	10,270,772.40	10,267,235.91	3,536.48	0.03%
6.8 TOTAL T-SERVICE	\$	642,140.91	641,735.16	405.75	0.06%	4,028,471.14	4,024,934.66	3,536.48	0.09%
6.9 SALES UNIT RATE	\$/m ³	0.1538	0.1537	0.0000	0.03%	0.1471	0.1470	0.0001	0.03%
### T-SERVICE UNIT RATE	\$/m ³	0.0644	0.0643	0.0000	0.06%	0.0577	0.0576	0.0001	0.09%
### SALES UNIT RATE	\$/GJ	4.002	4.001	0.0011	0.03%	3.828	3.827	0.0013	0.03%
### T-SERVICE UNIT RATE	\$/GJ	1.675	1.674	0.0011	0.06%	1.501	1.500	0.0013	0.09%

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

(A) EB-2019-0194 + ICM @ 38.53 MJ/m³ vs (B) EB-2019-0194 @ 38.53 MJ/m³

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)	%				(A) - (B)	%
7.1	VOLUME	m³	598,567	598,567	0	0.00%	9,976,121	9,976,121	0	0.00%	
7.2	CUSTOMER CHG.	\$	1,426.72	1,426.72	0.00	0.00%	3,445.65	3,445.65	0.00	0.00%	
7.3	DISTRIBUTION CHG.	\$	10,919.19	10,918.27	0.92	0.01%	80,232.34	80,194.32	38.02	0.05%	
7.4	LOAD BALANCING	\$	20,451.30	20,451.30	0.00	0.00%	327,588.67	327,588.67	0.00	0.00%	
7.5	SALES COMMDTY	\$	53,548.58	53,548.58	0.00	0.00%	891,761.27	891,761.27	0.00	0.00%	
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	\$	86,345.79	86,344.87	0.92	0.00%	1,303,027.93	1,302,989.91	38.02	0.00%	
7.8	TOTAL T-SERVICE	\$	32,797.20	32,796.29	0.92	0.00%	411,266.66	411,228.64	38.02	0.01%	
7.9	SALES UNIT RATE	\$/m³	0.1443	0.1443	0.0000	0.00%	0.1306	0.1306	0.0000	0.00%	
7.10	T-SERVICE UNIT RATE	\$/m³	0.0548	0.0548	0.0000	0.00%	0.0412	0.0412	0.0000	0.01%	
7.11	SALES UNIT RATE	\$/GJ	3.755	3.755	0.0000	0.00%	3.400	3.400	0.0001	0.00%	
7.12	T-SERVICE UNIT RATE	\$/GJ	1.426	1.426	0.0000	0.00%	1.073	1.073	0.0001	0.01%	
Rate 170 - Average Ind. Interr. - 75% LF							Rate 170 - Large Ind. Interr. - 75% LF				
			(A)	(B)	CHANGE						
					(A) - (B)	%				(A) - (B)	%
8.1	VOLUME	m³	9,976,120	9,976,120	0	0.00%	69,832,850	69,832,850	0	0.00%	
8.2	CUSTOMER CHG.	\$	3,445.65	3,445.65	0.00	0.00%	3,445.65	3,445.65	0.00	0.00%	
8.3	DISTRIBUTION CHG.	\$	72,847.22	72,821.52	25.70	0.04%	392,565.58	392,385.54	180.03	0.05%	
8.4	LOAD BALANCING	\$	327,588.63	327,588.63	0.00	0.00%	2,293,120.77	2,293,120.77	0.00	0.00%	
8.5	SALES COMMDTY	\$	891,761.18	891,761.18	0.00	0.00%	6,242,329.17	6,242,329.17	0.00	0.00%	
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	\$	1,295,642.69	1,295,617.00	25.70	0.00%	8,931,461.17	8,931,281.14	180.03	0.00%	
8.8	TOTAL T-SERVICE	\$	403,881.51	403,855.81	25.70	0.01%	2,689,132.00	2,688,951.97	180.03	0.01%	
8.9	SALES UNIT RATE	\$/m³	0.1299	0.1299	0.0000	0.00%	0.1279	0.1279	0.0000	0.00%	
8.10	T-SERVICE UNIT RATE	\$/m³	0.0405	0.0405	0.0000	0.01%	0.0385	0.0385	0.0000	0.01%	
8.11	SALES UNIT RATE	\$/GJ	3.380	3.380	0.0001	0.00%	3.329	3.329	0.0001	0.00%	
8.12	T-SERVICE UNIT RATE	\$/GJ	1.054	1.054	0.0001	0.01%	1.002	1.002	0.0001	0.01%	

UNION RATE ZONES
Calculation of 2020 ICM Bill Impacts
Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers

Line No.	Particulars	Proposed - EB-2019-0194 (1)		Proposed - EB-2019-0194 with ICM		Bill Impact		
		Total Bill	Unit Rate	Total Bill	Unit Rate	Total Bill Change	Including Federal Carbon Charge	Excluding Federal Carbon Charge
		(\$)	(cents/m ³)	(\$)	(cents/m ³)	(\$)	(%)	(%)
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)
	<u>Small Rate 01</u>							
1	Delivery Charges	476	21.6200	476	21.6200	-	0.0%	0.0%
2	Federal Carbon Charge	86	3.9100	86	3.9100	-	0.0%	0.0%
3	Gas Supply Charges (2)	411	18.6836	411	18.6836	-	0.0%	0.0%
4	Total Bill	973	44.2132	973	44.2132	-	0.0%	0.0%
5	Sales Service Impact					-	0.0%	0.0%
6	Bundled-T (Direct Purchase) Impact					-	0.0%	0.0%
	<u>Small Rate 10</u>							
7	Delivery Charges	5,114	8.5239	5,114	8.5239	-	0.0%	0.0%
8	Federal Carbon Charge	2,346	3.9100	2,346	3.9100	-	0.0%	0.0%
9	Gas Supply Charges (2)	10,205	17.0082	10,205	17.0082	-	0.0%	0.0%
10	Total Bill	17,665	29.4421	17,665	29.4421	-	0.0%	0.0%
11	Sales Service Impact					-	0.0%	0.0%
12	Bundled-T (Direct Purchase) Impact					-	0.0%	0.0%
	<u>Large Rate 10</u>							
13	Delivery Charges	16,692	6.6766	16,692	6.6766	-	0.0%	0.0%
14	Federal Carbon Charge	9,775	3.9100	9,775	3.9100	-	0.0%	0.0%
15	Gas Supply Charges (2)	42,521	17.0082	42,521	17.0082	-	0.0%	0.0%
16	Total Bill	68,987	27.5948	68,987	27.5948	-	0.0%	0.0%
17	Sales Service Impact					-	0.0%	0.0%
18	Bundled-T (Direct Purchase) Impact					-	0.0%	0.0%
	<u>Small Rate 20</u>							
19	Delivery Charges	88,199	2.9400	88,199	2.9400	-	0.0%	0.0%
20	Federal Carbon Charge	117,300	3.9100	117,300	3.9100	-	0.0%	0.0%
21	Gas Supply Charges (2)	406,905	13.5635	406,905	13.5635	-	0.0%	0.0%
22	Total Bill	612,403	20.4134	612,403	20.4134	-	0.0%	0.0%
23	Sales Service Impact					-	0.0%	0.0%
24	Bundled-T (Direct Purchase) Impact					-	0.0%	0.0%
	<u>Large Rate 20</u>							
25	Delivery Charges	344,482	2.2965	344,482	2.2965	-	0.0%	0.0%
26	Federal Carbon Charge	586,500	3.9100	586,500	3.9100	-	0.0%	0.0%
27	Gas Supply Charges (2)	1,985,303	13.2354	1,985,303	13.2354	-	0.0%	0.0%
28	Total Bill	2,916,285	19.4419	2,916,285	19.4419	-	0.0%	0.0%
29	Sales Service Impact					-	0.0%	0.0%
30	Bundled-T (Direct Purchase) Impact					-	0.0%	0.0%
	<u>Average Rate 25</u>							
31	Delivery Charges	73,021	3.2097	73,021	3.2097	-	0.0%	0.0%
32	Federal Carbon Charge	88,953	3.9100	88,953	3.9100	-	0.0%	0.0%
33	Gas Supply Charges (2)	280,148	12.3142	280,148	12.3142	-	0.0%	0.0%
34	Total Bill	442,122	19.4339	442,122	19.4339	-	0.0%	0.0%
35	Sales Service Impact					-	0.0%	0.0%
36	T-Service (Direct Purchase) Impact					-	0.0%	0.0%
	<u>Small Rate 100</u>							
37	Delivery Charges	317,322	1.1753	317,322	1.1753	-	0.0%	0.0%
38	Federal Carbon Charge	1,055,700	3.9100	1,055,700	3.9100	-	0.0%	0.0%
39	Gas Supply Charges (2)	4,605,618	17.0578	4,605,618	17.0578	-	0.0%	0.0%
40	Total Bill	5,978,640	22.1431	5,978,640	22.1431	-	0.0%	0.0%
41	Sales Service Impact					-	0.0%	0.0%
42	T-Service (Direct Purchase) Impact					-	0.0%	0.0%
	<u>Large Rate 100</u>							
43	Delivery Charges	2,592,753	1.0803	2,592,753	1.0803	-	0.0%	0.0%
44	Federal Carbon Charge	9,384,000	3.9100	9,384,000	3.9100	-	0.0%	0.0%
45	Gas Supply Charges (2)	40,330,731	16.8045	40,330,731	16.8045	-	0.0%	0.0%
46	Total Bill	52,307,485	21.7948	52,307,485	21.7948	-	0.0%	0.0%
47	Sales Service Impact					-	0.0%	0.0%
48	T-Service (Direct Purchase) Impact					-	0.0%	0.0%

Notes:

- (1) Reflects proposed rates per EB-2019-0194, Exhibit D, Tab 2, Rate Order, Appendix A.
- (2) Gas Supply charges based on Union North East Zone.

UNION RATE ZONES
Calculation of 2020 ICM Bill Impacts
Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers

Line No.	Particulars	Approved - EB-2019-0194 (1)		Proposed - EB-2019-0194 with ICM		Bill Impact		
		Total Bill	Unit Rate	Total Bill	Unit Rate	Total Bill Change	Including Federal Carbon Charge	Excluding Federal Carbon Charge
		(\$)	(cents/m ³)	(\$)	(cents/m ³)	(\$)	(%)	(%)
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)
	<u>Small Rate M1</u>							
1	Delivery Charges	399	18.1295	400	18.1973	1.49	0.4%	0.4%
2	Federal Carbon Charge	86	3.9100	86	3.9100	-	0.0%	0.0%
3	Gas Supply Charges	249	11.3027	249	11.3027	-	0.0%	0.0%
4	Total Bill	734	33.3418	735	33.4095	1.49	0.2%	0.2%
5	Sales Service Impact					1.49	0.2%	0.2%
6	Direct Purchase Impact					1.49	0.3%	0.4%
	<u>Small Rate M2</u>							
7	Delivery Charges	4,113	6.8544	4,151	6.9180	38	0.9%	0.9%
8	Federal Carbon Charge	2,346	3.9100	2,346	3.9100	-	0.0%	0.0%
9	Gas Supply Charges	6,782	11.3026	6,782	11.3026	-	0.0%	0.0%
10	Total Bill	13,240	22.0670	13,278	22.1306	38	0.3%	0.4%
11	Sales Service Impact					38	0.3%	0.4%
12	Direct Purchase Impact					38	0.6%	0.9%
	<u>Large Rate M2</u>							
13	Delivery Charges	13,723	5.4892	13,881	5.5526	158	1.2%	1.2%
14	Federal Carbon Charge	9,775	3.9100	9,775	3.9100	-	0.0%	0.0%
15	Gas Supply Charges	28,257	11.3026	28,257	11.3026	-	0.0%	0.0%
16	Total Bill	51,755	20.7018	51,913	20.7652	158	0.3%	0.4%
17	Sales Service Impact					158	0.3%	0.4%
18	Direct Purchase Impact					158	0.7%	1.2%
	<u>Small Rate M4</u>							
19	Delivery Charges	48,950	5.5943	49,476	5.6543	525	1.1%	1.1%
20	Federal Carbon Charge	34,213	3.9100	34,213	3.9100	-	0.0%	0.0%
21	Gas Supply Charges	98,898	11.3026	98,898	11.3026	-	0.0%	0.0%
22	Total Bill	182,060	20.8069	182,586	20.8669	525	0.3%	0.4%
23	Sales Service Impact					525	0.3%	0.4%
24	Direct Purchase Impact					525	0.6%	1.1%
	<u>Large Rate M4</u>							
25	Delivery Charges	371,057	3.0921	376,303	3.1359	5,246	1.4%	1.4%
26	Federal Carbon Charge	469,200	3.9100	469,200	3.9100	-	0.0%	0.0%
27	Gas Supply Charges	1,356,312	11.3026	1,356,312	11.3026	-	0.0%	0.0%
28	Total Bill	2,196,569	18.3047	2,201,815	18.3485	5,246	0.2%	0.3%
29	Sales Service Impact					5,246	0.2%	0.3%
30	Direct Purchase Impact					5,246	0.6%	1.4%
	<u>Small Rate M5</u>							
31	Delivery Charges	32,460	3.9345	32,460	3.9345	-	0.0%	0.0%
32	Federal Carbon Charge	32,258	3.9100	32,258	3.9100	-	0.0%	0.0%
33	Gas Supply Charges	93,246	11.3026	93,246	11.3026	-	0.0%	0.0%
34	Total Bill	157,964	19.1471	157,964	19.1471	-	0.0%	0.0%
35	Sales Service Impact					-	0.0%	0.0%
36	Direct Purchase Impact					-	0.0%	0.0%
	<u>Large Rate M5</u>							
37	Delivery Charges	182,287	2.8044	182,287	2.8044	-	0.0%	0.0%
38	Federal Carbon Charge	254,150	3.9100	254,150	3.9100	-	0.0%	0.0%
39	Gas Supply Charges	734,669	11.3026	734,669	11.3026	-	0.0%	0.0%
40	Total Bill	1,171,106	18.0170	1,171,106	18.0170	-	0.0%	0.0%
41	Sales Service Impact					-	0.0%	0.0%
42	Direct Purchase Impact					-	0.0%	0.0%
	<u>Small Rate M7</u>							
43	Delivery Charges	761,020	2.1139	766,698	2.1297	5,679	0.7%	0.7%
44	Federal Carbon Charge	1,407,600	3.9100	1,407,600	3.9100	-	0.0%	0.0%
45	Gas Supply Charges	4,068,936	11.3026	4,068,936	11.3026	-	0.0%	0.0%
46	Total Bill	6,237,556	17.3265	6,243,234	17.3423	5,679	0.1%	0.1%
47	Sales Service Impact					5,679	0.1%	0.1%
48	Direct Purchase Impact					5,679	0.3%	0.7%
	<u>Large Rate M7</u>							
49	Delivery Charges	3,068,595	5.9011	3,093,374	5.9488	24,780	0.8%	0.8%
50	Federal Carbon Charge	2,033,200	3.9100	2,033,200	3.9100	-	0.0%	0.0%
51	Gas Supply Charges	5,877,352	11.3026	5,877,352	11.3026	-	0.0%	0.0%
52	Total Bill	10,979,147	21.1137	11,003,926	21.1614	24,780	0.2%	0.3%
53	Sales Service Impact					24,780	0.2%	0.3%
54	Direct Purchase Impact					24,780	0.5%	0.8%

Notes:

(1) Reflects proposed rates per EB-2019-0194, Exhibit D, Tab 2, Rate Order, Appendix A.

UNION RATE ZONES
Calculation of 2020 ICM Bill Impacts
Sales Service and Direct Purchase Bill Impacts for Typical Small and Large Customers

		Approved - EB-2019-0194 (1)		Proposed - EB-2019-0194 with ICM		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/m³)	(\$)	(cents/m³)	(\$)	(%)	(%)
		(a)	(b)	(c)	(d)	(e) = (c - a)	(f) = (e / a)	(g)
	Small Rate M9							
1	Delivery Charges	174,040	2.5042	178,397	2.5669	4,357		2.5%
2	Gas Supply Charges	785,531	11.3026	785,531	11.3026	-		0.0%
3	Total Bill	959,571	13.8068	963,928	13.8695	4,357		0.5%
4	Sales Service Impact					4,357		0.5%
5	Direct Purchase Impact					4,357		2.5%
	Large Rate M9							
6	Delivery Charges	517,692	2.5656	530,669	2.6299	12,977		2.5%
7	Gas Supply Charges	2,280,639	11.3026	2,280,639	11.3026	-		0.0%
8	Total Bill	2,798,331	13.8682	2,811,307	13.9325	12,977		0.5%
9	Sales Service Impact					12,977		0.5%
10	Direct Purchase Impact					12,977		2.5%
	Average Rate M10							
11	Delivery Charges	7,209	7.6291	6,758	7.1509	(452)		-6.3%
12	Gas Supply Charges	10,681	11.3026	10,681	11.3026	-		0.0%
13	Total Bill	17,890	18.9317	17,439	18.4535	(452)		-2.5%
14	Sales Service Impact					(452)		-2.5%
15	Direct Purchase Impact					(452)		-6.3%
	Small Rate T1							
16	Delivery Charges	161,064	2.1370	163,329	2.1670	2,264	1.4%	1.4%
17	Federal Carbon Charge	294,697	3.9100	294,697	3.9100	-	0.0%	0.0%
18	Gas Supply Charges	851,877	11.3026	851,877	11.3026	-	0.0%	0.0%
19	Total Bill	1,307,638	17.3496	1,309,902	17.3796	2,264	0.2%	0.2%
20	Sales Service Impact					2,264	0.2%	0.2%
21	Direct Purchase Impact					2,264	0.5%	1.4%
	Average Rate T1							
22	Delivery Charges	249,496	2.1572	253,663	2.1932	4,166	1.7%	1.7%
23	Federal Carbon Charge	452,228	3.9100	452,228	3.9100	-	0.0%	0.0%
24	Gas Supply Charges	1,307,252	11.3026	1,307,252	11.3026	-	0.0%	0.0%
25	Total Bill	2,008,976	17.3698	2,013,143	17.4058	4,166	0.2%	0.3%
26	Sales Service Impact					4,166	0.2%	0.3%
27	Direct Purchase Impact					4,166	0.6%	1.7%
	Large Rate T1							
28	Delivery Charges	559,431	2.1832	570,514	2.2265	11,083	2.0%	2.0%
29	Federal Carbon Charge	1,001,902	3.9100	1,001,902	3.9100	-	0.0%	0.0%
30	Gas Supply Charges	2,896,187	11.3026	2,896,187	11.3026	-	0.0%	0.0%
31	Total Bill	4,457,520	17.3958	4,468,603	17.4391	11,083	0.2%	0.3%
32	Sales Service Impact					11,083	0.2%	0.3%
33	Direct Purchase Impact					11,083	0.7%	2.0%
	Small Rate T2							
34	Delivery Charges	732,036	1.2354	743,960	1.2555	11,924	1.6%	1.6%
35	Federal Carbon Charge	2,316,910	3.9100	2,316,910	3.9100	-	0.0%	0.0%
36	Gas Supply Charges	6,697,469	11.3026	6,697,469	11.3026	-	0.0%	0.0%
37	Total Bill	9,746,414	16.4480	9,758,338	16.4681	11,924	0.1%	0.2%
38	Sales Service Impact					11,924	0.1%	0.2%
39	Direct Purchase Impact					11,924	0.4%	1.6%
	Average Rate T2							
40	Delivery Charges	1,767,306	0.8935	1,810,752	0.9155	43,446	2.5%	2.5%
41	Federal Carbon Charge	7,733,583	3.9100	7,733,583	3.9100	-	0.0%	0.0%
42	Gas Supply Charges	22,355,396	11.3026	22,355,396	11.3026	-	0.0%	0.0%
43	Total Bill	31,856,285	16.1061	31,899,731	16.1281	43,446	0.1%	0.2%
44	Sales Service Impact					43,446	0.1%	0.2%
45	Direct Purchase Impact					43,446	0.5%	2.5%
	Large Rate T2							
46	Delivery Charges	2,920,264	0.7891	2,998,654	0.8103	78,390	2.7%	2.7%
47	Federal Carbon Charge	14,470,480	3.9100	14,470,480	3.9100	-	0.0%	0.0%
48	Gas Supply Charges	41,829,679	11.3026	41,829,679	11.3026	-	0.0%	0.0%
49	Total Bill	59,220,424	16.0017	59,298,813	16.0229	78,390	0.1%	0.2%
50	Sales Service Impact					78,390	0.1%	0.2%
51	Direct Purchase Impact					78,390	0.5%	2.7%
	Large Rate T3							
52	Delivery Charges	5,606,546	2.0558	5,712,155	2.0946	105,609		1.9%
53	Gas Supply Charges	30,823,547	11.3026	30,823,547	11.3026	-		0.0%
54	Total Bill	36,430,093	13.3584	36,535,702	13.3972	105,609		0.3%
55	Sales Service Impact					105,609		0.3%
56	Direct Purchase Impact					105,609		1.9%

Notes:

(1) Reflects proposed rates per EB-2019-0194, Exhibit D, Tab 2, Rate Order, Appendix A.