ENBRIDGE®

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<u>**VIA RESS and EMAIL**</u>

September 17, 2020

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

Dear Ms. Long:

Re: EB-2020-0095 Enbridge Gas Inc. ("Enbridge Gas")
    2021 Rates – Interrogatory Responses

In accordance with Procedural Order No. 1, enclosed please find Interrogatory Responses from Enbridge Gas in the above noted proceeding.

Please contact the undersigned if you have any questions.

Yours truly,

(Original Digitally Signed)

Rakesh Torul
Technical Manager,
Regulatory Applications

cc: David Stevens, Aird and Berlis LLP
       EB-2020-0095 Intervenors

ENBRIDGE GAS INC.

Answer to Interrogatory from
OEB Staff ("STAFF")

Interrogatory

Reference:

Exhibit B/Tab 1/Schedule 1/pp. 5-6

The MAADs Decision (EB-2017-0306/0307, Amalgamation Decision of the Ontario Energy Board regarding the merger of Enbridge Gas Distribution and Union Gas Limited, August 30, 2018) approved an inflation factor calculated as the year-over-year percentage change in the annualized average of four quarters of Statistics Canada's GDP IPI FDD. The inflation factor is adjusted annually on this basis with no restatement for adjustments by Statistics Canada. For 2021 rates, the inflation factor of 2.0% is based on the average annual change in the GDP IPI FDD for Q1 to Q4 in 2019.

Question:

a) Please confirm that "adjusted annually on this basis with no restatement for adjustments by Statistics Canada" means that the inflation factor to calculate the Enbridge Gas PCI for 2021 rates will not be updated if there are further revisions to the inflation factor by Statistics Canada.

b) Please indicate if the inflation factor will be revised when the Ontario Energy Board issues the inflation factor to be used for adjusting 2021 IRM rates.

Response

a) Confirmed. Enbridge Gas has applied an inflation factor in the calculation of the PCI for 2021 Rates which reflects the most recent GDP IPI FDD data from Statistics Canada at the time of filing the 2021 Rates application. Enbridge Gas is not proposing to update the PCI if there are further revisions to the inflation factor by Statistics Canada.

b) Please see response to part a).

ENBRIDGE GAS INC.

Answer to Interrogatory from
OEB Staff ("STAFF")

Interrogatory

Reference:

Exhibit B/Tab 1/Schedule 1/p. 10 and Exhibit D/Tab 1/Rate Order Working Papers
Schedule 10

The Enbridge Gas Distribution (EGD) rate zone average use adjustment reflects the
existing OEB-approved methodology to forecast the year over year change in 2021
average use consumption for Rate 1 and Rate 6 customers. The methodology relies on
regression equations to estimate the underlying historical trend of average use. Driver
variables have remained unchanged and coefficients of existing models are re-
estimated to include the most recent year of actual data.

In the 2019 rates proceeding (EB-2018-0305), average use increased by 2.3% for
Rate 1 customers and by 1.7% for Rate 6 customers in the EGD rate zone. In the 2020
rates proceeding (EB-2019-0194), the average use forecasting methodology resulted in
average use declining by 1.2% for Rate 1 and 1.9% for Rate 6 customers. In the current
proceeding (2021 rates), average use has increased by 2.9% for Rate 1 customers and
by 1.0% for Rate 6 customers.

Question:

a) Please explain if the results of the forecasting methodology are in line with actual
   use that Enbridge Gas has observed over the stated years (2019, 2020 and 2021).

b) Please provide reasons for the volatility in the average use consumption over the
   past three years resulting from the forecasting methodology.

c) Please provide the regression equations and the regression statistics used in the
   average use forecasting methodology. Also, provide a statistical opinion on the
   regression model and the regression results.

d) Please explain how the increase in average use impacts 2021 rates for Rate 1 and
   Rate 6 customers.

Response

a)   Please see Exhibit I.EP.1 b).

b)   Please see Exhibit I.EP.1 b).

c)   Please see Exhibit I.EP.1 a), c), d), e).

d)   The table below summarize the proposed 2021 annual typical bill impact for Rate 1 and Rate 6 customers in EGD rate zone.

For a Rate 1 customer, if there is no change in average use, the annual bill impact is $6.82 from PCI. The bill impact is decreased by ($4.14) as a result of an increase in average use. Together with the change in Demand Side Management of ($0.69), the net impact is $1.99.

For Rate 6 customer if there is no change in average use, the annual bill impact is $40.44 from PCI. The bill impact is decreased by ($13.67) as a result of an increase in average use. Together with the change in Demand Side Management of ($2.05), net impact is $24.71.

Line No.	Particulars ($)	Rate 1 EGD (a)	Rate 6 EGD (b)
1	Price Cap Index	6.82	40.44
2	Average Use/Normalized Average Consumption	(4.14)	(13.67)
3	Demand Side Management	(0.69)	(2.05)
4	Total Bill Impact (1)	1.99	24.71

Note:
(1)   EGD rate zone Rate 1 bill impact based on a typical residential customer consuming 2,400 m^3 per year (EB-2020-0095, Exhibit D, Tab 1, Rate Order, Working Papers, Schedule 3.1, Page 2, Col. 7, Line 2.6).
EGD rate zone Rate 6 bill impact based on a typical commercial/industrial customer consuming 29,287 m^3 per year (EB-2020-0095, Exhibit D, Tab 1, Rate Order, Working Papers, Schedule 3.1, Page 3, Col. 7, Line 1.6).

ENBRIDGE GAS INC.

Answer to Interrogatory from
OEB Staff ("STAFF")

Interrogatory

Reference:

Exhibit B/Tab 1/Schedule 1/pp. 10-18, Exhibit D/Tab1/Schedule 10 and Exhibit D/Tab 2/Schedule 13

The Union Gas rate zones general service storage and delivery rates have been adjusted to reflect the 2019 actual Normalized Average Consumption (NAC), using the 2021 OEB-approved weather normal methodology as approved in Union Gas's last cost of service proceeding. For 2021, the NAC adjustment is the variance between 2018 actual NAC and 2019 actual NAC. The 2019 actual NAC is lower than the 2018 actual NAC for Rates 01, M1 and M2 by 0.1%, 0.9% and 1.9% respectively.

Question:

a) Please provide the data used to calculate the 20-year declining trend and the regression statistics used in the calculation of 2021 degree days using the 20-year declining trend methodology. Also, provide a statistical opinion on the regression results.

b) The annual bill impact for a typical M1 residential customer in the Union South rate zone is a net increase of $8.91 and for a Rate 01 residential customer in the Union North West and Union North East, the annual bill impact is an increase of $10.40 and $10.72 respectively. Please provide the contribution of the decrease in NAC to the annual bill impact for Rate 01 and Rate M1 customers.

c) The rate impact for a typical Rate 1 residential customer in the EGD rate zone with annual consumption of 2,400 m3 is a net increase of $1.99 per year. Please explain the reasons for the difference in the rate impact for a residential customer in the EGD vs. Union Gas rate zones despite the lower annual consumption used for the Union Gas rate zones (2,200 m3 vs. 2,400 m3 for EGD). What are the drivers for the net increase in the bill impact for the Union Gas rate zones?

<u>Response</u>

a) The methodology used to forecast the normal HDD is a 50:50 blend of the 30-year average and the 20-year trend for both Union South and Union North rate zones. Please refer to the response to Exhibit I.LPMA.5 for the data and regression statistics used to calculate the 2021 weather normal HDD.

The 20-year trend regression method used to forecast the heating degree days includes a single variable (time) to explain the trend that may be present in the data corresponding to the regression period (years 2000 to 2019).

The coefficient calculated by this method represents the estimated rate of increase (or decrease) of the number heating degree days each year.

Positive coefficient results for the trend variable in both Union South and Union North indicate that a slightly colder annual trend is observed for the past 20 years, at annual increase of 4.12 HDD and 2.38 HDD respectively. Compared to the 2019 actual annual HDD, these annual increases round to 0%.

It is also worth noting that the 20-year trend estimates are relatively close to the 30-year averages for both Union South and North regions.

R-squared is a statistical measure which represents how much variation in the dependent variable (actual HDD) is captured by the independent variables (time trend in this case) in the model. Low R-squared and t-Stat figures reflect that weather is a highly variable and unpredictable phenomenon, and this variability is not entirely captured with a simple trend model. For further explanation regarding the investigation of R-squared can be found in the undertaking response at EB-2019-0194, Exhibit JT1.5.

b & c) Please see Table 1 for the breakdown, including NAC, of the net increase in total bill impacts for typical residential customers in EGD rate zone Rate 1 and Union rate zones Rate M1 and Rate 01.

Table 1
Breakdown of 2021 Rates Residential Total Bill Impact

Line No.	Particulars ($)	Rate 1 EGD	Rate M1 Union South	Rate 01 Union North West	Rate 01 Union North East
		(a)	(b)	(c)	(d)
1	Price Cap Index	6.82	5.90	7.85	8.07
2	Average Use/Normalized Average Consumption	(4.14)	1.47	0.33	0.42
3	Demand Side Management	(0.69)	(0.09)	(0.16)	(0.16)
4	Capital Pass-through	-	1.51	2.39	2.39
5	Parkway Delivery Obligation	-	0.12	-	-
6	Total Bill Impact (1)	1.99	8.91	10.40	10.72

Note:
(1)   EGD rate zone bill impact based on a typical residential customer consuming 2,400 m^3 per year per Exhibit D, Tab 1, Rate Order, Working Papers, Schedule 3.1, Page 2, Col. 7, Line 2.6. Union rate zone bill impacts based on a typical residential customer consuming 2,200 m^3 per year per Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 3, Line 11.

<u>ENBRIDGE GAS INC.</u>

Answer to Interrogatory from
<u>OEB Staff ("STAFF")</u>

<u>Interrogatory</u>

<u>Reference</u>:

Exhibit B/Tab 1/Schedule 1/pp. 15-17

As per the Parkway Delivery Obligation Settlement Framework, Union South direct purchase (DP) customers east of Dawn that choose to delivery gas to Parkway are paid a Parkway Delivery Commitment Incentive (PDCI). The incentive paid is recovered from all Union South rate classes. The evidence indicated that the PDCI is paid monthly to DP customers.

<u>Question</u>:

a) Please provide the natural gas volumes and the number of DP customers that delivered gas to Parkway and that were eligible for the PDCI in 2019 and 2020.

b) Please provide the total amounts that have been paid or will be paid as PDCI during 2019 and 2020.

<u>Response</u>

Enbridge Gas would like to clarify the preamble to this question. The Parkway Delivery Commitment Incentive (PDCI) is paid to Union South direct purchase customers that are obligated to deliver gas at Parkway, not customers that choose to deliver gas at Parkway.

a) – b) Please see Table 1.

Table 1
PDO and PDCI Details

Line No.	Particulars	Average PDO Volumes (TJ/d)	Average No. of DP Customers (Customers/mo)	PDCI Costs ($000's)
		(a)	(b)	(c)
1	2019 Actual	242	490	13,112
2	2020 Forecast (1)	253	506	13,317

Note:
(1)   2020 average PDO volumes and number of DP customers provided as of year-to-date August 31, 2020. 2020 PDCI costs based on year-to-date average PDO volumes forecast to December 31, 2020.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Association of Power Producers of Ontario ("APPrO")

Interrogatory

Reference:

Exhibit B Tab 1 Schedule 1 Page 13 of 18

Preamble:

Pursuant to the Ontario Energy Board's ("Board") letter dated March 25, 2020, titled "Accounting Order for the Establishment of Deferral Accounts to Record Impacts Arising from the COVID-19 Emergency", Enbridge Gas plans to establish two deferral accounts in order to track any incremental costs and lost revenues related to the COVID-19 pandemic. The first account is to be used to track lost revenues arising from the COVID-19 emergency, while the second is to be used to track other incremental costs arising from the COVID-19 emergency.

The questions that follow are intended to gain a better understanding of Enbridge Gas' planned use of these two new deferral accounts.

Please assume for the purpose of these questions that no new guidance is provided by the Board as a result of its EB-2020-0133 stakeholder consultation. Please answer the following questions below based on what is currently known.

Question:

a) Given that significant COVID-related expenses could result in upward rate pressure for customers, what mitigation measures, if any, has Enbridge Gas taken to minimize any incremental costs arising from COVID-19?

b) Please provide several illustrative examples of the incremental costs arising from the COVID-19 pandemic that Enbridge Gas has incurred up until present. To the extent those incremental costs can be quantified or estimated at this time, please do so.

c) With reference to the examples identified in (b) above, how does Enbridge Gas propose to differentiate between incremental costs arising from COVID-19 and other costs?

d) What actions has Enbridge Gas taken, if any, to reduce capital or operating costs so as to mitigate against any adverse financial impacts arising from COVID-19?

e) How does Enbridge Gas propose to reflect the savings arising from these actions in its COVID-19 costs deferral account?

f) Has Enbridge Gas seen any lost revenue since start of the COVID-19 pandemic? If so, how has Enbridge Gas been tracking loss of revenue due to COVID-19 rather than other causes (for example, weather)?

g) Please provide a table outlining the calculation of Enbridge Gas' lost or increased revenues due to COVID-19 by customer class year-to-date.

h) Does Enbridge Gas possess any insurance to mitigate the risk of any key customer bill payment defaults?

Response

a) to h) There are no impacts related to the COVID-19 pandemic included in the 2021 Rates application. 2021 Rates are set based on the rate setting mechanism approved by the Board in the MAADs proceeding.

As indicated in the pre-filed evidence, the Board has ordered gas distributors (including EGI), as well as other OEB regulated entities, to establish deferral accounts in order to track impacts arising from the COVID-19 pandemic, and has initiated a stakeholder consultation to develop accounting guidance related to those accounts. The Company will follow any guidance issued by the Board through its consultation.

<u>ENBRIDGE GAS INC.</u>

Answer to Interrogatory from
<u>Building Owners and Managers Association, Greater Toronto ("BOMA")</u>

<u>INTERROGATORY</u>

<u>Reference:</u>

Exhibit B/Tab 1/Schedule 1/Page 3 of 18, Table 1, Line 4

<u>Preamble:</u>

2021 Price Cap Index (1.7%) is set out as 20,151 and 16,257. However, multiplying the 2020 Approved in EB-2019-0194 by 1.7% produces 21,286.87 and 21,975.58.

<u>Question:</u>

a) Please provide the calculation that resulted in the figures provided in Line 4 of Table 1 as the 2021 Price Cap Index (1.7%) for the EGD Rate Zone and the Union Rate Zones (20,151 and 16,257).

<u>Response</u>

As part of Enbridge Gas's approved rate setting framework, certain pass through items, such as DSM and capital pass-through projects, are not subject to escalation and are deducted from 2020 approved revenue before calculating 2021 PCI revenue. The amounts in Exhibit B, Tab 1, Schedule 1, Table 1 include all revenue, including the pass through items not subject to escalation.

The detailed calculation of the 2021 Price Cap Index is provided at Exhibit D, Tab 1, Rate Order, Working Papers 5, column (d) for the EGD rate zone and Exhibit D, Tab 2, Rate Order, Working Papers 5, column (g)[1] for the Union rate zones.

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[1] Calculated as the Adjusted Base Revenue in column (f) multiplied by the 2021 PCI of 1.7%.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Building Owners and Managers Association, Greater Toronto ("BOMA")

INTERROGATORY

Reference:

Exhibit B/Tab 1/Schedule 1/Appendix B/Page 1 of 3/Line 7

Preamble:

Enbridge Gas states that it is "to propose an approach to disposition as part of the 2019 Deferral and Variance Account Disposition and Utility Earnings proceeding (expected to occur in 2020)".

Question:

a) Please indicate whether Enbridge Gas has proposed an approach to disposition as part of the 2019 Deferral and Variance Account Disposition and Utility Earnings proceeding.

Response

The proposed approach to dispose the balances in the Accounting Policy Changes Deferral Account is filed in the 2019 Utility Earnings and Disposition of Deferral and Variance Account Balances Application (EB-2020-0134), filed on September 3, 2020.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Building Owners and Managers Association, Greater Toronto ("BOMA")

INTERROGATORY

Reference:

Exhibit B/Tab 1/Schedule 1/Appendix B/Page 2 of 3/Lines 2 and 3

Preamble:

Enbridge Gas states that it is to "continue to review and report on certain investigations as to its unaccounted-for-gas".

Question:

a) Please indicate whether Enbridge Gas has addressed this as part of the MAADs directive of a report of UAF for all rate zones by end of 2019.

Response

Enbridge Gas has addressed the issue of Unaccounted-For-Gas (UFG or UAF) and filed a UFG study which was reviewed by the Board in the 2020 Rates application (EB-2019-0194) – see May 14, 2020 Decision and Order at pages 18-20.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Building Owners and Managers Association, Greater Toronto ("BOMA")

INTERROGATORY

Reference:

Exhibit D/Tab 1/Rate Order/Appendix A; Exhibit D/Tab 2/Rate Order/Appendix A

Question:

a) Please provide a table that sets out the average percentage rate increase for the average customer in each rate class in each rate zone.

Response

a) The bill impact percentage change for all in-franchise rate classes is provided at Exhibit D, Tab 1, Rate Order, Working Papers, Schedule 3.1 and 3.2 for customers in the EGD rate zone and Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 4 for customers in the Union rate zones.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Energy Probe ("EP")

INTERROGATORY

Reference:

Exhibit B, Tab 1, Schedule 1, Page 11 of 18; Exhibit D, Tab 1, Rate Order, Working
Papers, Schedule 10; Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 13;
EB-2019-0194, Exhibit KT1.1, Staff.1 a), c), d), Energy Probe.1, LPMA.3 a)

Question:

a) Please provide updates to the tables and charts in Exhibit KT1.1 showing 2019
    actuals 2020 E and 2021 forecast

b) Please provide a discussion for each rate class
        i.   Changes in 2019 actuals
        ii.   2020 YTD trends and Covid-19
        iii.   2021 forecast
        iv.   Specifically the drivers for +2.9% increase for EGD Rate 1 while Union RZ
               M1 is -1.5%

c) Please provide updated regression equations and the regression statistics.

d) Please discuss any statistics that are "out of norm".

e) Please update the EB-2019-0194 KT1.5 Tables if not covered in the above
    responses.

Response

EGD Rate Zone:

a), c), d), e)
For its 2021 rate application, Enbridge Gas used the same average use models as in
EGD's 2014 to 2020 rate applications (with addition of 2019 actual data to the
estimation period). The key factor used to evaluate the accuracy of the General Service
average use forecast is the percentage variance between normalized actual and

normalized forecast average use per customer. As seen in the Actual to Board Approved Percentage variance table (Table 1) below, the average percentage variance from forecast over the last 10 years is 0.2% for Rate 1 and 1.0% for Rate 6.

Besides tracking historical accuracy through the percentage variances, the models also have been subject to a battery of tests. Please see the models' estimation and test results for 2021 forecast in Tables 5 and 8 and the diagnostic test results in Tables 6 and 9 below. The results show that the models continued to have high R-squared, and to generate small forecast errors while passing the key statistical specification tests. Based on the updated results there is no statistics that alerts as 'out of norm'.

TABLE 1
GENERAL SERVICE AVERAGE USE

	Test Year	Rate Classes	Col. 1 Actual Normalized Average Use (m^3)	Col. 2 Board Approved Normalized Average Use (m^3)	Col. 3 Variance Normalized Average Use (1-2)	Col. 4 %Variance Normalized Average Use (3/2)*100
FISCAL YEAR	2004*	Rate 1	2,843	2,857	(14)	-0.5%
		Rate 6	21,472	21,612	(140)	-0.6%
	2005	Rate 1	2,890	2,953	(63)	-2.1%
		Rate 6	22,241	22,507	(266)	-1.2%
YEAR	2006	Rate 1	2,796	2,850	(54)	-1.9%
		Rate 6	22,272	21,999	273	1.2%
	2007	Rate 1	2,726	2,687	39	1.5%
		Rate 6	22,783	21,010	1,773	8.4%
	2008	Rate 1	2,636	2,647	(11)	-0.4%
		Rate 6	24,869	24,204	665	2.7%
	2009	Rate 1	2,604	2,637	(33)	-1.3%
		Rate 6	27,281	28,165	(884)	-3.1%
	2010	Rate 1	2,579	2,622	(43)	-1.6%
		Rate 6	29,106	27,949	1,157	4.1%
	2011	Rate 1	2,594	2,643	(49)	-1.8%
		Rate 6	29,471	28,029	1,442	5.1%
	2012	Rate 1	2,529	2,510	18	0.7%
		Rate 6	28,941	30,122	(1,182)	-3.9%
	2013	Rate 1	2,547	2,568	(22)	-0.8%
		Rate 6	29,878	29,878	(0)	0.0%
	2014	Rate 1	2,475	2,433	41	1.7%
		Rate 6	28,634	28,383	251	0.9%
	2015	Rate 1	2,427	2,419	9	0.4%
		Rate 6	28,600	28,341	259	0.9%
	2016	Rate 1	2,401	2,480	(79)	-3.2%
		Rate 6	28,203	28,753	(550)	-1.9%
	2017	Rate 1	2,485	2,472	13	0.5%
		Rate 6	29,462	29,058	404	1.4%
	2018	Rate 1	2,456	2,358	98	4.2%
		Rate 6	29,377	28,656	721	2.5%
	2019	Rate 1	2,463	2,412	51	2.1%
		Rate 6	29,348	29,154	194	0.7%

Rate 1	Average % variance	2004-2019	-0.2%
Rate 1	Average % variance	2010-2019	0.2%
Rate 6	Average % variance	2004-2019	1.1%
Rate 6	Average % variance	2010-2019	1.0%

TABLE 5 - RATE 1 REVENUE CLASS 20 REGRESSION EQUATIONS

Metro Region - Central Weather Zone

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	2.67	6.53	0.00
LOG(CDD)	0.69	13.49	0.00
LOG(REALCRCRPG)	-0.04	-1.31	0.20
LOG(MET20VINT)	0.65	7.31	0.00
DUM2008	0.01	0.36	0.72
DUM2010	-0.02	-0.68	0.50
R-squared	0.98		
Adjusted R-squared	0.97		
S.E. of regression	0.02		
F-statistic	248.89		0.00

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	0.00	0.26	0.80
DLOG(CDD)	0.75	19.61	0.00
DLOG(MET20VINT)	0.84	2.44	0.02
DUM2008	0.00	0.19	0.85
ECM_MET20(-1)	-0.94	-4.97	0.00
R-squared	0.93		
Adjusted R-squared	0.93		
S.E. of regression	0.02		
F-statistic	104.03		0.00

Western Region - Central Weather Zone

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	2.13	1.61	0.12
LOG(CDD)	0.64	10.80	0.00
LOG(REALCRCRPG)	-0.07	-2.09	0.05
LOG(WES20VINT)	0.57	2.50	0.02
LOG(CENTEMP)	0.10	0.64	0.53
DUM2008	-0.02	-0.99	0.33
DUM2010	-0.05	-1.89	0.07
R-squared	0.96		
Adjusted R-squared	0.96		
S.E. of regression	0.03		
F-statistic	128.25		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	-0.01	-1.05	0.30
DLOG(CDD)	0.70	16.43	0.00
DLOG(REALCRCRPG)	-0.02	-0.46	0.65
DUM2008	0.00	0.00	1.00
ECM_WES20(-1)	-0.99	-5.25	0.00
R-squared	0.91		
Adjusted R-squared	0.90		
S.E. of regression	0.03		
F-statistic	75.17		0.000

Central Region - Central Weather Zone

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	2.17	1.79	0.08
LOG(CDD)	0.64	9.59	0.00
LOG(REALCRCRPG)	-0.004	-0.12	0.90
LOG(CEN20VINT)	0.81	4.11	0.00
LOG(CENTEMP)	0.10	0.73	0.47
DUM2008	-0.05	-2.21	0.04
R-squared	0.96		
Adjusted R-squared	0.96		
S.E. of regression	0.03		
F-statistic	147.65		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	0.01	0.51	0.62
DLOG(CDD)	0.68	13.75	0.00
DLOG(REALCRCRPG)	0.03	0.65	0.52
DUM2008	-0.01	-0.48	0.63
DLOG(CEN20VINT)	1.06	1.49	0.15
ECM_CEN20(-1)	-0.96	-5.14	0.00
R-squared	0.89		
Adjusted R-squared	0.87		
S.E. of regression	0.03		
F-statistic	46.05		0.000

TABLE 5 CONTINUED - RATE 1 REVENUE CLASS 20 REGRESSION EQUATIONS

Northern Region - Central Weather Zone

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	2.93	2.24	0.03
LOG(CDD)	0.62	9.55	0.00
LOG(REALCRCRPG)	-0.04	-1.07	0.29
LOG(NOR20VINT)	0.71	3.34	0.00
LOG(CENTEMP)	0.03	0.19	0.85
DUM2009	-0.07	-2.65	0.01
R-squared	0.97		
Adjusted R-squared	0.96		
S.E. of regression	0.03		
F-statistic	179.29		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	0.00	0.21	0.83
DLOG(CDD)	0.67	14.26	0.00
DLOG(REALCRCRPG)	0.02	0.34	0.73
DLOG(NOR20VINT)	0.87	1.50	0.14
ECM_NOR20(-1)	-1.00	-5.51	0.00
R-squared	0.89		
Adjusted R-squared	0.88		
S.E. of regression	0.03		
F-statistic	60.44		0.000

Eastern Weather Zone

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	2.45	4.06	0.00
LOG(EDD)	0.68	9.19	0.00
LOG(REALERCRPG)	-0.02	-0.58	0.56
LOG(ERC20VINT)	0.75	8.19	0.00
DUM2008	-0.03	-1.15	0.26
DUM2010	-0.06	-2.31	0.03
R-squared	0.97		
Adjusted R-squared	0.97		
S.E. of regression	0.03		
F-statistic	191.64		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	0.00	-0.68	0.51
DLOG(EDD)	0.77	13.09	0.00
DLOG(ERC20VINT)	0.53	0.99	0.33
ECM_ERC20(-1)	-1.02	-2.43	0.02
AR(1)	-0.13	-0.30	0.76
R-squared	0.89		
Adjusted R-squared	0.87		
S.E. of regression	0.03		
F-statistic	55.94		0.000

Niagara Weather Zone

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	2.49	3.87	0.00
LOG(NDD)	0.68	8.43	0.00
LOG(REALNRCRPG)	0.88	5.56	0.00
LOG(NRC20VINT)	0.01	0.24	0.81
DUM2008	-0.03	-0.73	0.47
DUM2010	-0.07	-1.70	0.10
R-squared	0.95		
Adjusted R-squared	0.95		
S.E. of regression	0.04		
F-statistic	120.67		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	-0.01	-1.93	0.06
DLOG(NDD)	0.74	13.20	0.00
ECM_NRC20(-1)	-0.61	-3.52	0.00
R-squared	0.86		
Adjusted R-squared	0.85		
S.E. of regression	0.03		
F-statistic	92.13		0.000

TABLE 6 - RATE 1

Model Diagnostic Tests

Col 1.	Col 2.	Col 3.	Col 4.	Col 5.	Col 6.	Col 7.	Col 8.
Test		Metro Region	Western Region	Central Region	Northern Region	Eastern Weather Zone	Niagara Weather Zone
Breusch-Godfrey Serial Correlation LM Test	Test Statistic	0.65	0.11	0.32	0.47	3.36	1.32
	P Value	0.42	0.74	0.57	0.49	0.07	0.25
ARCH Test	Test Statistic	3.92	1.12	0.71	2.58	6.44	0.01
	P Value	0.05	0.29	0.40	0.11	0.01	0.92
Chow Forecast Test	Test Statistic	3.32	2.09	1.95	2.88	2.40	0.60
	P Value	0.08	0.16	0.17	0.10	0.13	0.44
Ramsey RESET Test	Test Statistic	0.26	0.13	0.15	0.01	0.86	1.52
	P Value	0.62	0.72	0.70	0.92	0.36	0.23

TABLE 8 - RATE 6 REVENUE CLASS 12 REGRESSION EQUATIONS

Central Revenue Class 12 (Apartment)

Single Equation Model

Variable	Coefficient	t-Statistic	p-Value
C	1.62	0.88	0.38
LOG(CDD)	0.57	4.21	0.00
LOG(CENTEMP)	0.68	4.10	0.00
DUM1996	-0.11	-2.74	0.01
DUM2008	0.22	3.42	0.00
AR(1)	0.39	2.22	0.03
R-squared	0.94		
Adjusted R-squared	0.93		
S.E. of regression	0.06		
F-statistic	89.543		0.000

Eastern Revenue Class 12 (Apartment)

Single Equation Model

Variable	Coefficient	t-Statistic	p-Value
C	4.71	2.54	0.02
LOG(EDD)	0.47	4.76	0.00
LOG(TIME)	-0.05	-2.50	0.02
DUMERC12	0.26	7.13	0.00
DUM2011	-0.13	-3.31	0.00
LOG(REALERCCPG)	-0.12	-2.03	0.05
LOG(EASTEMP)	0.37	1.51	0.14
DUM2014	0.11	4.23	0.00
R-squared	0.95		
Adjusted R-squared	0.94		
S.E. of regression	0.04		
F-statistic	71.14		0.000

Niagara Revenue Class 12 (Apartment)

Single Equation Model

Variable	Coefficient	t-Statistic	p-Value
C	5.87	3.86	0.00
LOG(NDD)	0.47	5.55	0.00
LOG(TIME)	-0.02	-1.38	0.18
LOG(NIAGEMP)	0.21	0.96	0.35
LOG(REALNRCCPG)	-0.03	-0.71	0.48
DUMNRC12	-0.05	-2.06	0.05
DUM2011	-0.07	-2.26	0.03
AR(1)	0.03	0.15	0.88
R-squared	0.83		
Adjusted R-squared	0.79		
S.E. of regression	0.04		
F-statistic	18.52		0.000

TABLE 8 CONTINUED - RATE 6 REVENUE CLASS 48 REGRESSION EQUATIONS

Central Revenue Class 48 (Commercial)

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	-3.58	-1.82	0.08
LOG(CDD)	0.78	8.05	0.00
LOG(TIME)	-0.21	-5.98	0.00
LOG(CRCCOMVAC)	-0.06	-1.97	0.06
LOG(ONTGDP)	0.58	4.32	0.00
LOG(REALCRCCPG)	-0.11	-2.81	0.01
DUM2008	0.08	2.78	0.01
R-squared	0.87		
Adjusted R-squared	0.84		
S.E. of regression	0.04		
F-statistic	30.27		0.000

Eastern Revenue Class 48 (Commercial)

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	-4.03	-1.92	0.07
LOG(EDD)	0.70	5.62	0.00
LOG(TIME)	-0.27	-7.69	0.00
LOG(ONTGDP)	0.66	4.77	0.00
LOG(REALERCCPG)	0.13	4.37	0.00
DUM2008	-0.16	-3.60	0.00
R-squared	0.87		
Adjusted R-squared	0.85		
S.E. of regression	0.05		
F-statistic	38.71		0.000

Niagara Revenue Class 48 (Commercial)

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	-1.10	-0.55	0.59
LOG(NDD)	0.71	7.77	0.00
LOG(TIME)	-0.11	-3.37	0.00
LOG(REALNRCCPG)	-0.15	-3.33	0.00
LOG(ONTGDP)	0.40	2.98	0.01
DUM2009	0.05	1.62	0.12
R-squared	0.81		
Adjusted R-squared	0.78		
S.E. of regression	0.04		
F-statistic	24.59		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	0.01	1.07	0.30
DLOG(CDD)	0.81	12.98	0.00
DLOG(TIME)	-0.09	-1.93	0.06
DLOG(CRCCOMVAC)	-0.06	-1.82	0.08
DLOG(REALCRCCPG)	-0.04	-0.66	0.52
ECM_CRC48(-1)	-0.81	-4.55	0.00
R-squared	0.87		
Adjusted R-squared	0.84		
S.E. of regression	0.04		
F-statistic	36.81		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	0.01	1.28	0.21
DLOG(EDD)	0.70	8.04	0.00
DLOG(TIME)	-0.15	-2.62	0.01
DLOG(REALERCCPG)	-0.05	-0.86	0.40
ECM_ERC48(-1)	-0.72	-4.04	0.00
R-squared	0.75		
Adjusted R-squared	0.71		
S.E. of regression	0.04		
F-statistic	21.53		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	0.00	0.31	0.76
DLOG(NDD)	0.75	10.77	0.00
DLOG(REALNRCCPG)	-0.07	-1.22	0.23
ECM_NRC48(-1)	-0.83	-4.19	0.00
R-squared	0.82		
Adjusted R-squared	0.81		
S.E. of regression	0.04		
F-statistic	46.90		0.000

TABLE 8 CONTINUED - RATE 6 REVENUE CLASS 73 REGRESSION EQUATIONS

Central Revenue Class 73 (Industrial)

Long Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	1.20	0.43	0.67
LOG(CDD)	0.46	2.76	0.01
LOG(TIME)	-0.17	-3.75	0.00
LOG(ONTGDP)	0.50	2.86	0.01
DUM2008	0.54	13.88	0.00

R-squared	0.93		
Adjusted R-squared	0.92		
S.E. of regression	0.07		
F-statistic	102.29		0.000

Short Run Equation

Variable	Coefficient	t-Statistic	p-Value
C	-0.03	-2.11	0.04
DLOG(CDD)	0.56	9.06	0.00
DLOG(ONTGDP)	0.72	2.15	0.04
DUM2008	0.25	6.21	0.00
DUM2009	-0.20	-5.17	0.00
ECM_CRC73(-1)	-0.66	-6.60	0.00

R-squared	0.85		
Adjusted R-squared	0.82		
S.E. of regression	0.04		
F-statistic	31.47		0.000

Eastern Revenue Class 73 (Industrial)

Single Equation Model

Variable	Coefficient	t-Statistic	p-Value
C	-181,360	-1.26	0.22
EDD	30	1.33	0.19
DUM2003	58,421	1.89	0.07
DUM2004	-166,654	-4.11	0.00
DUM2009	140,808	7.44	0.00
EASTEMP	384	1.63	0.11
TIME	-2,605	-1.39	0.18

R-squared	0.89		
Adjusted R-squared	0.87		
S.E. of regression	28,307.36		
F-statistic	38.66		0.000

Niagara Revenue Class 73 (Industrial)

Single Equation Model

Variable	Coefficient	t-Statistic	p-Value
C	-0.70	-0.20	0.84
LOG(NDD)	0.72	3.58	0.00
DUM2002	-0.37	-4.39	0.00
DUM2007	0.49	4.77	0.00
DUM2010	0.41	3.88	0.00
LOG(NIAGEMP)	1.21	2.33	0.03
AR(1)	0.72	4.71	0.00

R-squared	0.97		
Adjusted R-squared	0.97		
S.E. of regression	0.10		
F-statistic	162.36		0.000

TABLE 9-RATE 6
Model Diagnostic Tests

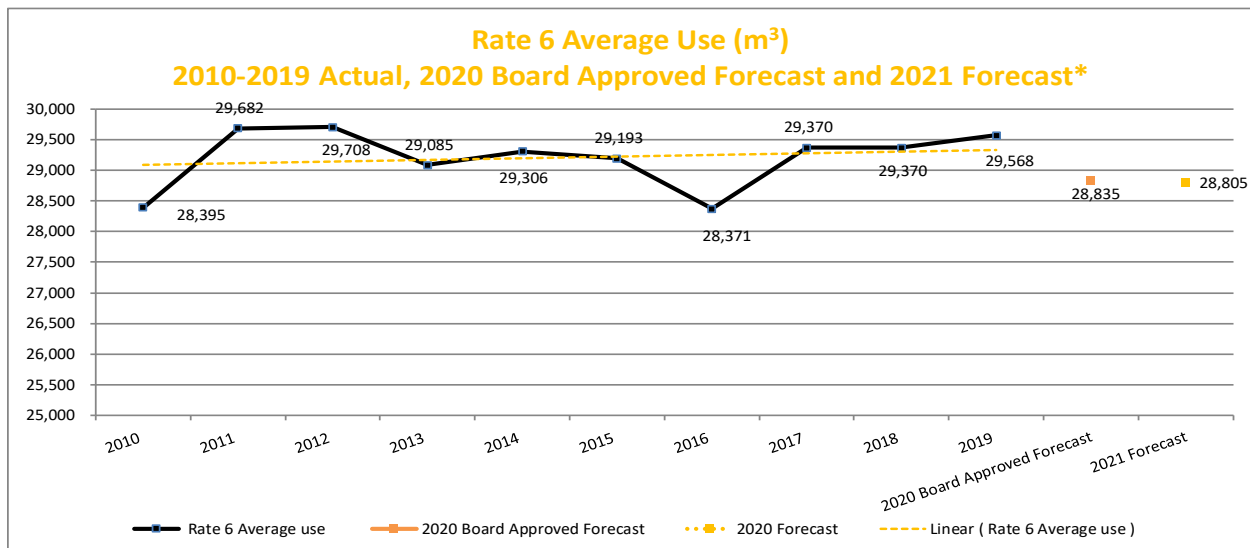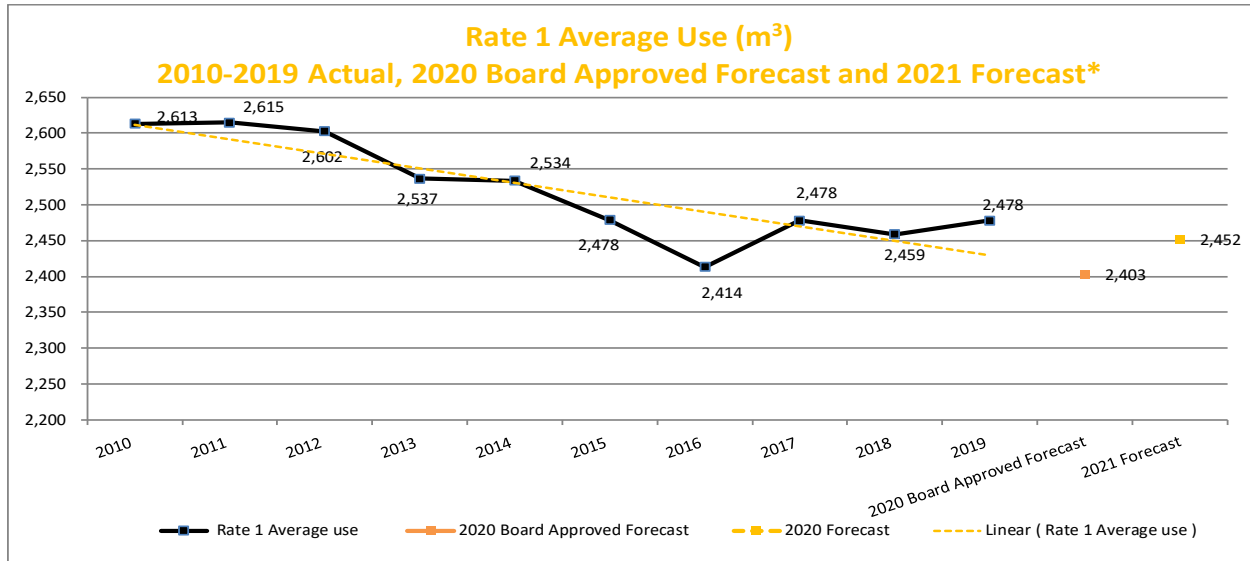| Col 1.	Col 2.	Col 3.	Col 4.	Col 5.	Col 6.	Col 7.	Col 8.	Col 9.	Col 10.	Col 11.
		Revenue Class 12 (Apartment) Model Diagnostic Tests			Revenue Class 48 (Commercial) Model Diagnostic Tests			Revenue Class 73 (Industrial) Model Diagnostic Tests		
Test		Central Weather Zone	Eastern Weather Zone	Niagara Weather Zone	Central Weather Zone	Eastern Weather Zone	Niagara Weather Zone	Central Weather Zone	Eastern Weather Zone	Niagara Weather Zone
Breusch-Godfrey Serial Correlation LM Test	Test Statistic	3.39	0.11	0.16	0.01	0.17	0.00	3.39	12.43	2.01
	P Value	0.07	0.74	0.69	0.94	0.68	0.99	0.07	0.00	0.16
ARCH Test	Test Statistic	0.57	0.40	3.26	0.09	0.25	0.39	0.57	2.12	2.50
	P Value	0.45	0.53	0.07	0.77	0.61	0.53	0.45	0.15	0.11
Chow Forecast Test	Test Statistic	2.02	0.05	0.01	2.12	1.01	0.66	2.02	1.03	0.00
	P Value	0.17	0.83	0.94	0.16	0.32	0.42	0.17	0.32	0.99
Ramsey RESET Test	Test Statistic	1.99	1.85	0.16	1.14	0.24	0.41	1.99	4.91	3.23
	P Value	0.17	0.19	0.70	0.30	0.63	0.53	0.17	0.04	0.08

b) i., ii., iii., iv.

The 2.9% increase in average use for Rate 1 customers represents the percentage change in average use from the 2020 Board Approved forecast to 2021 Forecast.

The 2020 Board Approved forecast was developed in an earlier proceeding using the actuals to 2018 and the assumptions from the 2019 Spring Economic Outlook while the 2021 forecast has been developed using the actuals to 2019 and the assumptions from 2020 Spring Economic Outlook. As a result, 2.9% increase in Rate 1 average use is not

reflective of the actual average use trend.

The following table illustrates actual average use trend for Rate 1 and 6 for the last 10 years[1], 2020 Board Approved forecast and the forecast for 2021. These figures have all been normalized to 2021 Budget degree days for comparability. The average annual decline in actual average use for the last 10 years is 0.6% for Rate 1. Over the same period, Rate 6 shows an average annual increase of 0.5%, but it remains relatively flat since 2013.
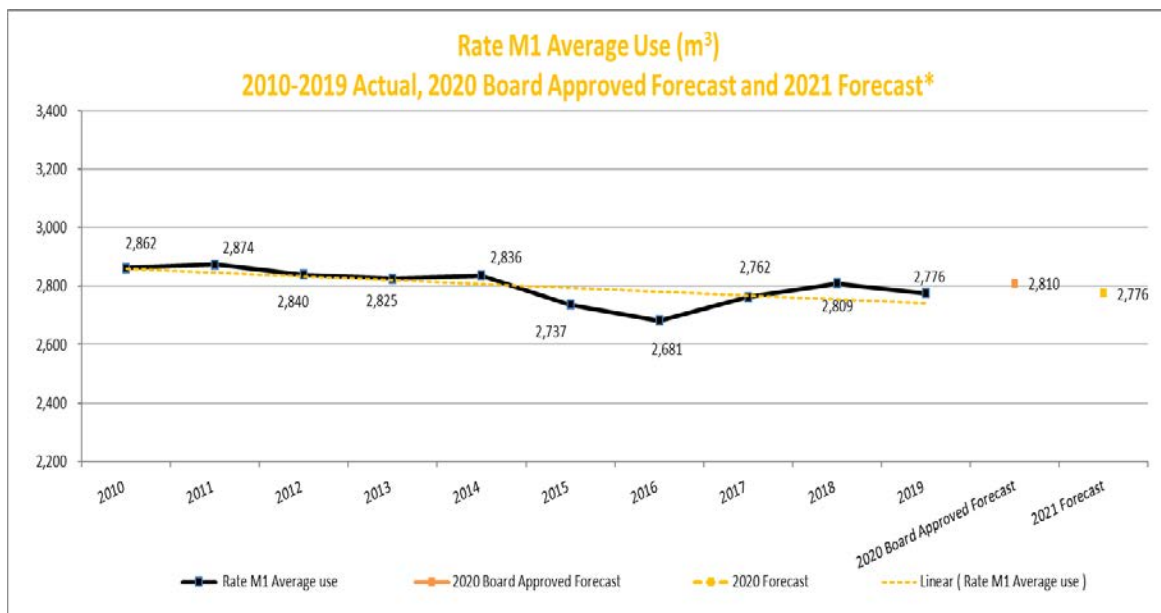
Rate 1 Average Use (m³)
2010-2019 Actual, 2020 Board Approved Forecast and 2021 Forecast*

A line chart showing Rate 1 Average Use with the following data points: 2010: 2,613; 2011: 2,615; 2012: 2,602; 2013: 2,537; 2014: 2,534; 2015: 2,478; 2016: 2,414; 2017: 2,478; 2018: 2,459; 2019: 2,478; 2020 Board Approved Forecast: 2,403; 2021 Forecast: 2,452. Legend: Rate 1 Average use, 2020 Board Approved Forecast, 2020 Forecast, Linear (Rate 1 Average use).

Rate 6 Average Use (m³)
2010-2019 Actual, 2020 Board Approved Forecast and 2021 Forecast*

A line chart showing Rate 6 Average Use with the following data points: 2010: 28,395; 2011: 29,682; 2012: 29,708; 2013: 29,085; 2014: 29,306; 2015: 29,193; 2016: 28,371; 2017: 29,370; 2018: 29,370; 2019: 29,568; 2020 Board Approved Forecast: 28,835; 2021 Forecast: 28,805. Legend: Rate 6 Average use, 2020 Board Approved Forecast, 2020 Forecast, Linear (Rate 6 Average use).

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[1] Please note that 10 years trend line has been provided for representation purpose only. The forecast has been developed using longer historical data and regression methodology (not trend model) which driven by driver variables in the model and the long-term trend.
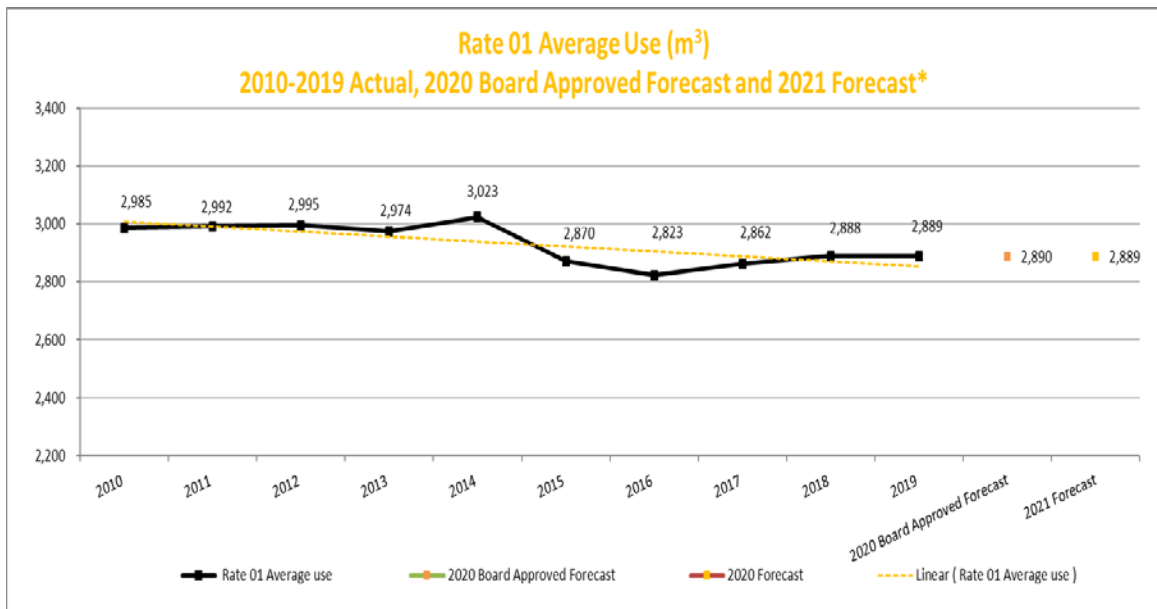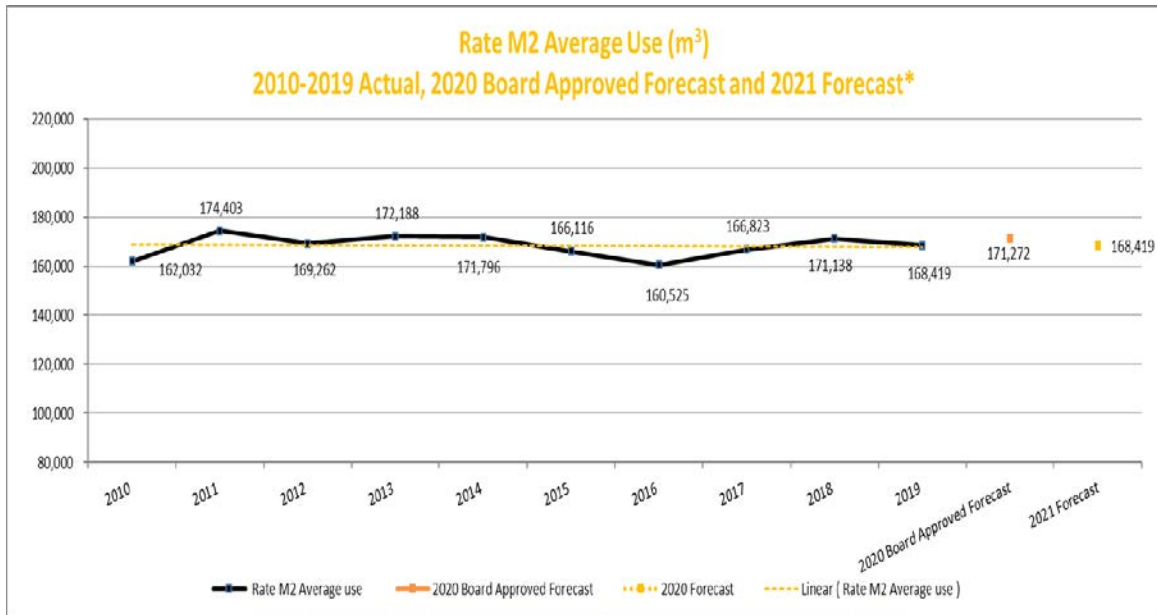
Average Rate 1 and Rate 6 normalized average use in 2019 have been higher than expected which caused slightly higher average use forecast for both Rate 1 and Rate 6 for 2021. Year to date, 2020 Rate 1 average use has been approximately 2% higher than budgeted average use while Rate 6 average use has been 1% lower than budgeted use. The Company suspects that increased Rate 1 (residential) consumption might be driven by more people staying in their houses to contain the expansion of the disease during the pandemic. Similarly, lower Rate 6 consumption than budget might be due to the Government's requirement for closures of certain types of businesses during Covid-19. 2021 forecast average use for both Rate 1 and Rate 6 look reasonable when current average consumption has been considered, but the length of the pandemic can be a risk for a forecast and might impact forecast accuracy for 2020 and 2021.
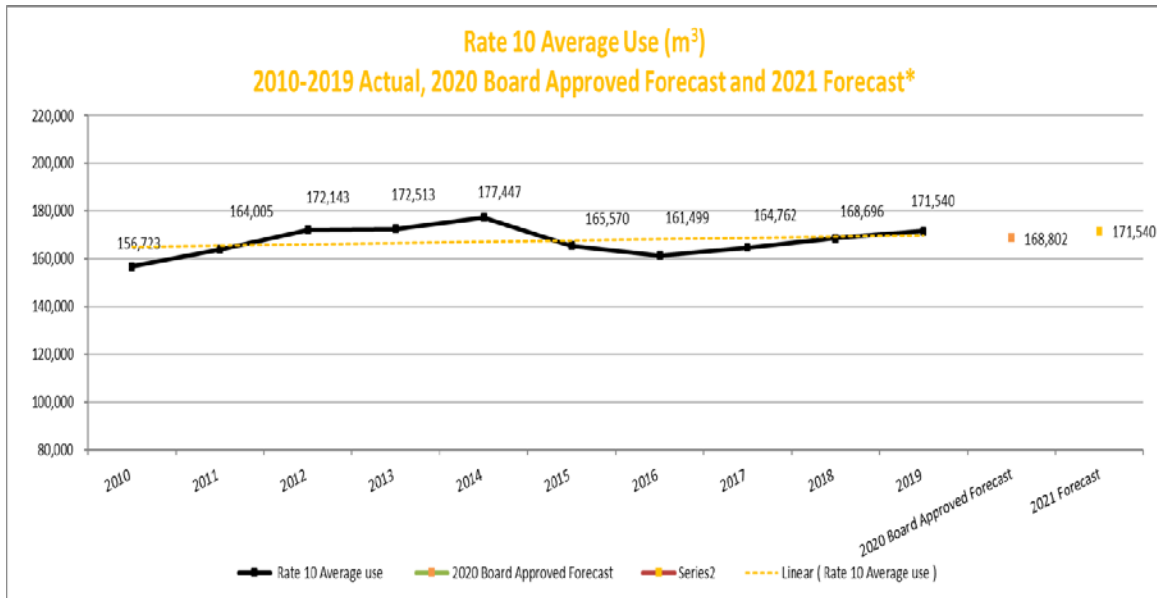
Union Rate Zones:

a), e)

The charts and tables for the actual Normalized Average Consumption (NAC) at 2021 Normal Degree Day and target NAC for 2020 and 2021 for Rate M1, Rate M2, Rate 01 and Rate 10 are shown below:

Rate M1 Average Use (m³)
2010-2019 Actual, 2020 Board Approved Forecast and 2021 Forecast*

Rate M2 Average Use (m³)
2010-2019 Actual, 2020 Board Approved Forecast and 2021 Forecast*

Rate 01 Average Use (m³)
2010-2019 Actual, 2020 Board Approved Forecast and 2021 Forecast*

Rate 10 Average Use (m³)
2010-2019 Actual, 2020 Board Approved Forecast and 2021 Forecast*

Year	Rate M1		Actual vs Target %	Rate M2		Actual vs Target %
	Actual	Target	variance	Actual	Target	variance
2013	2,768	2,778	-0.4%	169,422	143,867	17.8%
2014	2,748	2,751	-0.1%	167,537	165,085	1.5%
2015	2,676	2,761	-3.1%	163,129	169,121	-3.5%
2016	2,667	2,852	-6.5%	159,933	172,693	-7.4%
2017	2,764	2,738	0.9%	166,969	166,297	0.4%
2018	2,810	2,654	5.9%	171,248	159,319	7.5%
2019	2,780	2,767	0.5%	168,624	167,039	0.9%
Average			-0.4%			2.5%

Year	Rate 01		Actual vs Target % variance	Rate 10		Actual vs Target % variance
	Actual	Target		Actual	Target	
2013	2,900	2,765	4.9%	168,975	157,381	7.4%
2014	2,923	2,898	0.9%	172,516	167,443	3.0%
2015	2,799	2,901	-3.5%	162,078	169,025	-4.1%
2016	2,788	3,015	-7.5%	159,855	177,214	-9.8%
2017	2,835	2,844	-0.3%	163,483	164,329	-0.5%
2018	2,864	2,771	3.3%	167,467	158,894	5.4%
2019	2,880	2,853	1.0%	171,056	164,301	4.1%
Average			-0.2%			0.8%

b) i)

Target NAC for 2019 is the actual 2017 use weather normalized at the 2019 normal weather. The 2019 actual NAC has come at equal or below 1% relative to the target NAC for all the Union rate zone rate classes except for rate 10 NAC that came at 4.1%. The average percentage variance since 2013 is close to zero percent in Rate M1 and Rate 01, only 0.8% for Rate 10 and 2.5% in Rate M2.

For comparison purposes, the actual NAC shown in the charts are at the 2021 weather normal. A simple trend line placed over the last ten years indicates that NAC is declining at the average of 0.3% in Rate M1 and Rate 01 but increasing at 0.5% in Rate M2 and, 1.1% in Rate 10. The NAC for all rate classes is declining since 2013 in the range of 0.03% to 0.3% annually.

b) ii)

For the past 8 months lower actual NAC relative to the target NAC (2020 target NAC is the 2018 actual use at the 2020 weather normal) is roughly in line with the ten-year trend for all rate classes except for Rate 10. Due to the mix of customers present in each rate class, the effect of Covid-19 is unclear.

YTD August 2020-Percentage Variance Actual to Target NAC

Rate Class	% variance
Rate M1	-6%
Rate M2	-7%
Rate 01	-2%
Rate 10	-4%

b) iii)

Based on the Board-approved methodology, the 2021 Target NAC for Rate M1, Rate M2, Rate 01 and Rate 10 are the actual 2019 NAC weather normalized using the 2021 normal weather. Visual inspection suggests that target NAC is line with the historical trend.

b) iv)

The -1.5% represents the change from the 2020 target NAC to the 2021 target NAC which is based on the 2018 to 2019 actual NAC variance, and updated for the 2021 Board-approved normal.

c) d)

Based on Board-approved methodology, Enbridge Gas uses the latest available NAC (2019) as 2021 forecast in the Union rate zones. There are no regression equations or regression statistics as a result, and no 'out of norm' comment can be made.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Energy Probe ("EP")

INTERROGATORY

Reference:

Exhibit B, Tab 1, Schedule 1, Pages 10/11; Exhibit D, Tab 1, Rate Order, Working Papers, Schedule 10; Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 13; EB-2019-0194, Exhibit KT1.3, Budget Degree Days

Question:

a) Please update Exhibit KT1.3 to show the derivation of the 2021 forecast Budget Degree Days for each of the 3 DD Zones

b) Discuss if each of the Preferred DD Methodologies still produce the best result compared to the other options.

Response

a) Please see Attachment 1 for the updated 'Budget Degree Days' evidence.

b) During its IR terms (including deferred rebasing), the Company continues to use the previously-approved degree day (DD) forecasting methodologies for each rate zone. The Company evaluates the rankings and performance of DD forecasting methodologies only in its rebasing applications and continues to use the Board approved methodologies during the related IR (or deferred rebasing) period. As already stated in the 2020 rate application (EB-2019-0194, Exhibit JT1.5), the Company will present evidence about the appropriate DD forecasting methodologies to be used on a go-forward basis in its next rebasing application.

<u>2021 BUDGET DEGREE DAYS</u>

1. The purpose of this evidence is to provide the forecast of degree days for the 2021 test year (EGD rate zone).

2. The 2021 degree day forecasts were prepared in accordance with the Ontario Energy Board's (the "Board") EB-2012-0459 Decision with Reasons dated July 17, 2014. The Board has approved the use of the 50:50 Hybrid method for the Central weather zone, the de Bever with Trend method for the Eastern weather zone and the 10-year moving average method for the Niagara weather zone. Table 1 displays the 2021 degree day forecasts that were generated according to the approved methodologies for each weather zone within the franchise using Environment Canada degree days. Conversions to Gas Supply degree days are depicted in the latter part of this evidence.

Table 1
Forecast of 2021 Environment Canada Degree Days

Region	Methodology	Forecast
Central	50:50 Hybrid	3,683
Eastern	De Bever with Trend	4,415
Niagara	10-year moving average	3,413

<u>Degree Day Forecast Methodology</u>

3. The degree day forecast for the Central weather zone was prepared using the 50:50 Hybrid method which is an average of the 10-year Moving Average and the 20-year Trend forecast. Table 2 provides the actual Environment Canada degree day data for the Central weather zone and the resultant 10-year moving average, 20-year Trend, and 50:50 Hybrid forecast. The 10-year moving average is calculated using

data covering the period 2010 to 2019[1], while the 20-year Trend model is estimated for the period 2000 to 2019. The 20-year Trend model results are provided in Table 3.

Table 2
Environment Canada Degree Day Forecast – Central

Col. 1	Col. 2
Calendar Year	Actual[1]
2000	3,826
2001	3,420
2002	3,630
2003	3,982
2004	3,798
2005	3,797
2006	3,378
2007	3,722
2008	3,837
2009	3,836
2010	3,501
2011	3,648
2012	3,215
2013	3,775
2014	4,103
2015	3,766
2016	3,462
2017	3,502
2018	3,758
2019	3,927
2021 Forecast (10-year Moving average)	3,666
2021 Forecast (20-year Trend)[2]	3,700
2021 Forecast (50:50 Hybrid)[3]	3,683

[1]Environment Canada heating degree day observations from Pearson Int't Airport until June 2013. Effective June 13th, 2013 Environment Canada is no longer able to provide degree day data for Pearson Int'l Airport. Data from June 12th, 2013 and thereafter are obtained from the Toronto Int'l A station.

[2]Calculated using the 20-year Trend regression equation from Table 3.

[3]Average of 10-year Moving average and 20-year Trend forecasts.

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[1] The 10 year moving average for year t is calculated as $(DD_{t-2}+DD_{t-3}+ \ldots +DD_{t-10}+DD_{t-11})/10$ where DD is the actual degree day value.

Table 3
Model Results & Test Statistics: Central_20-year Trend Methodology

Sample: 2000 2019   Included observations: 20

Col. 1	*Col. 2*	*Col. 3*	*Col. 4*	*Col. 5*
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3,687.7	113.88	32.38	0.000
TREND	0.5490	8.85	0.06	0.951
R-squared	0.000	F-statistic	0.00	
		F-prob	0.95	

Environment Canada Central Degree Day= 3,687.7+0.5490*TREND

The trend variable takes the values of 1 through 20 for each of the years from 2000 to 2019. The value of 22 is used for 2021 to generate 2021 degree day forecast.

4. The degree day forecast for the Eastern weather zone was prepared using the de Bever with Trend method. This method regresses actual Environment Canada degree days on a constant, a 5-year weighted average of Environment Canada degree days[2] and a trend. The 5-year weighted averages are lagged two years. Table 4 displays the actual Environment Canada degree day data for the Eastern weather zone, the 5-year weighted averages used to estimate the model, and the resultant degree day forecast for 2018. The model is estimated over the period 1950 to 2016 for a total of 67 years which is determined by the cycle length with smallest variance. Estimation results are provided in Table 5.

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[2] The five-year weighted average for year t is calculated as $(5*DD_{t-2}+4*DD_{t-3}+3*DD_{t-4}+2*DD_{t-5}+DD_{t-6})/15$ where DD is the actual degree day value.

Table 4
Environment Canada Degree Day Forecast – Eastern

Col. 1	Col. 2	Col.3
Calendar Year	Actual[1]	5-year Weighted MA[2]
1950	4,824	4,665
1951	4,587	4,594
1952	4,404	4,661
1953	4,059	4,641
1954	4,707	4,556
1955	4,689	4,385
1956	4,799	4,465
1957	4,405	4,523
1958	4,736	4,626
1959	4,718	4,584
1960	4,451	4,652
1961	4,586	4,669
1962	4,826	4,596
1963	4,921	4,584
1964	4,569	4,667
1965	4,810	4,753
1966	4,683	4,709
1967	4,882	4,755
1968	4,780	4,735
1969	4,698	4,775
1970	4,899	4,778
1971	4,797	4,762
1972	5,014	4,805
1973	4,420	4,808
1974	4,725	4,876
1975	4,514	4,736
1976	5,008	4,723
1977	4,597	4,637
1978	4,939	4,741
1979	4,589	4,695
1980	4,920	4,790
1981	4,438	4,735
1982	4,647	4,798
1983	4,536	4,674
1984	4,535	4,658
1985	4,659	4,601
1986	4,501	4,570
1987	4,328	4,585
1988	4,640	4,564
1989	4,931	4,482
1990	4,250	4,524
1991	4,303	4,657
1992	4,861	4,537
1993	4,780	4,461
1994	4,730	4,585
1995	4,585	4,646
1996	4,603	4,681
1997	4,786	4,680
1998	3,828	4,664
1999	4,137	4,689
2000	4,543	4,399
2001	4,115	4,276
2002	4,381	4,328
2003	4,715	4,240
2004	4,637	4,273
2005	4,421	4,444
2006	4,037	4,531
2007	4,447	4,511
2008	4,488	4,373
2009	4,534	4,376
2010	3,973	4,388
2011	4,144	4,430
2012	4,055	4,293
2013	4,402	4,242
2014	4,632	4,155
2015	4,486	4,209
2016	4,322	4,346
2017	4,378	4,428
2018	4,547	4,421
2019	4,777	4,420
2021 Forecast (de Bever with Trend)[3]	4,415	

[1]Environment Canada heating degree day observations from MacDonald-Cartier Airport until December 2011. Effective December 15th, 2011, Environment Canada is no longer able to provide degree day data for MacDonald-Cartier Airport. Data from December 15th, 2011 and thereafter are obtained from the Ottawa Int'l A station.
[2]5-year weighted average lagged 2 years.
[3]Calculated using the de Bever with Trend regression equation from Table 5.

Table 5
Model Results & Test Statistics: Eastern_De Bever with Trend Methodology

Sample: 1950 2019   Included observations: 70

Col. 1	*Col. 2*	*Col. 3*	*Col. 4*	*Col. 5*
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3,830.51	1,042.93	3.67	0.00
ECEDD5WA	0.1929	0.22	0.88	0.38
DBWT_TREND	-4.0946	1.83	-2.24	0.03
R-squared	0.17	F-statistic	6.69	
		F-prob	0.00	

Environment Canada Eastern Degree Day= 3,830.51+0.1929*ECEDD5WA-4.0946*TREND
5-year weighted average of 4,556 is used for 2021 to generate 2021 degree day forecast.
Trend variables takes the values from 1 to 70 for the period of 1950-2019. 72 is used for 2021 to generate 2021 degree day forecast.

5. The degree day forecast for the Niagara weather zone was prepared using the 10-year Moving Average method. Table 6 displays the actual Environment Canada degree day data for the Niagara weather zone and the resultant degree day forecast which is calculated using data covering the period 2010 to 2019[3].

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[3] The 10 year moving average for year *t* is calculated as $(DD_{t-2}+DD_{t-3}+ … +DD_{t-10}+DD_{t-11})/10$ where DD is the actual degree day value.

Table 6
Environment Canada Degree Day Forecast – Niagara

Col. 1	*Col. 2*
Calendar Year	Actual[1]
2010	3,344
2011	3,458
2012	3,021
2013	3,527
2014	3,832
2015	3,450
2016	3,100
2017	3,258
2018	3,488
2019	3,649
2021 Forecast (10-yr Moving average)	3,413

[1]Environment Canada heating degree day observations from St. Catherines Airport until August 2008. Effective September 2008 Environment Canada is no longer able to provide degree day data for St.Catherines Airport. Data from September 2008 and thereafter are obtained from the Vineland Climate Station.

Gas Supply Degree Day Conversion

6. The final step in the degree day forecast involves the conversion of Environment Canada degree days to Gas Supply degree days. Environment Canada degree days are calculated as the average of degree days related to the daily minimum and maximum temperatures within a 24-hour period. On the other hand, Gas Supply degree days are determined relative to average hourly temperatures within a 24-hour period. The latter is used by EGD's Gas Control as it is perceived to be more representative of temperature variations within a given day. Although there are differences between the two measurements, the data sets are highly correlated.

7. The conversion leverages the correlation between both series and is carried out by regressing actual Gas Supply degree days onto actual Environment Canada degree days. The resultant equation (one for each weather zone) is used to convert the

Environment Canada degree day forecast to the Gas Supply degree day forecast. Tables 7, 8 and 9 display actual Environment Canada degree days, actual Gas Supply degree days and the resultant Gas Supply degree day forecasts for the 2018 test year for each of the Central, Eastern, and Niagara regions, respectively. Each conversion model uses a sample that is consistent with the prescribed approved methodology to generate the forecasts. The sample for the Eastern region utilizes all the historical data available for Gas Supply degree days.

Table 7
Determination of Gas Supply Equivalent Degree Days - Central

Col. 1	*Col. 2*	*Col. 3*
Calendar Year	Actual Environment Canada Degree Days	Actual Gas Supply Degree Days
2000	3,826	3,784
2001	3,420	3,400
2002	3,630	3,597
2003	3,982	3,949
2004	3,798	3,766
2005	3,797	3,750
2006	3,378	3,355
2007	3,722	3,659
2008	3,837	3,801
2009	3,836	3,767
2010	3,501	3,466
2011	3,215	3,597
2012	3,775	3,194
2013	4,103	3,746
2014	4,103	4,044
2015	3,766	3,710
2016	3,462	3,412
2017	3,502	3,499
2018	3,758	3,728
2019	3,927	3,887
2021 Forecast (10-year Moving average)[1]		3,628
2021 Forecast (20-year Trend)[2]		3,661
2021 Forecast (50:50 Hybrid)[3]		3,645

[1]2021 forecast (10-year Moving average) is calculated using the following regression equation:
Gas Supply degree day =92.5259+0.9646*(Environment Canada degree day)
R-squared=0.9964, Adjusted R-squared=0.9960, F-statistic=2,227.49, Prob(F-statistic)=0.000000

[2]2021 forecast (20-year Trend) is calculated using the following regression equation:
Gas Supply degree day =96.9294+0.9633*(Environment Canada degree day)
R-squared=0.9957, Adjusted R-squared=0.9955, F-statistic=4,200.51, Prob(F-statistic)=0.000000

[3]2021 forecast (50:50 Hybrid) is an average of 10-year Moving average and 20-year Trend.

Table 8
Determination of Gas Supply Equivalent Degree Days - Eastern

Col. 1	Col. 2	Col. 3
Calendar Year	Actual Environment Canada Degree Days	Actual Gas Supply Degree Days
1970	4,899	5,018
1971	4,797	4,584
1972	5,014	4,816
1973	4,420	4,480
1974	4,725	4,858
1975	4,514	4,229
1976	5,008	4,901
1977	4,597	4,604
1978	4,939	4,920
1979	4,589	4,550
1980	4,920	4,853
1981	4,438	4,361
1982	4,647	4,617
1983	4,536	4,515
1984	4,535	4,504
1985	4,659	4,648
1986	4,501	4,507
1987	4,328	4,268
1988	4,640	4,601
1989	4,931	4,883
1990	4,250	4,225
1991	4,303	4,270
1992	4,861	4,746
1993	4,780	4,715
1994	4,730	4,700
1995	4,585	4,530
1996	4,603	4,561
1997	4,786	4,711
1998	3,828	3,802
1999	4,137	4,112
2000	4,543	4,506
2001	4,115	4,071
2002	4,381	4,317
2003	4,715	4,663
2004	4,637	4,598
2005	4,421	4,397
2006	4,037	4,012
2007	4,447	4,411
2008	4,488	4,431
2009	4,534	4,472
2010	3,973	3,947
2011	4,144	4,108
2012	4,055	4,048
2013	4,402	4,484
2014	4,632	4,552
2015	4,486	4,397
2016	4,322	4,231
2017	4,378	4,318
2018	4,547	4,459
2019	4,777	4,682
2021 Forecast[1]		4,373

[1]2021 forecast is calculated using the following regression equation:
Gas Supply degree days = 161.2077+0.9541*(Environment Canada degree days)
R-squared=0.9382, Adjusted R-squared=0.9369, F-statistic=728.18, Prob(F-statistic)=0.000000

Table 9
Determination of Gas Supply Equivalent Degree Days - Niagara

Col. 1	_Col. 2_	_Col. 3_
Calendar Year	Actual Environment Canada Degree Days	Actual Gas Supply Degree Days
2010	3,344	3,322
2011	3,458	3,334
2012	3,021	3,013
2013	3,527	3,537
2014	3,832	3,814
2015	3,450	3,548
2016	3,100	3,233
2017	3,258	3,282
2018	3,488	3,537
2019	3,649	3,670
2021 Forecast[1]		3,429

[1] 2021 forecast is calculated using the following regression equation:
Gas Supply degree days = 276.2035+0.9238*(Environment Canada degree days)
R-squared=0.9168, Adjusted R-squared=0.9064, F-statistic=88.14, Prob(F-statistic)=0.0000

2021 Degree Day Forecasts:

Table 10
Summary of 2021 Degree Days Forecast

Region	_Environment Canada Degree Days_	_Gas Supply Degree Days_
Central	3,683	3,645
Eastern	4,415	4,373
Niagara	3,413	3,429

ENBRIDGE GAS INC.

Answer to Interrogatory from
Energy Probe ("EP")

INTERROGATORY

Reference:

Exhibit B, Tab 1 Schedule 1 Page 11; Exhibit D, Tab 2, Rate Order, Working Papers,
Schedule 14, Page 3

Preamble:

Energy Probe would like to better understand how the Parkway Project costs are being
allocated between Union South and Ex-Franchise customers.

Question:

a) Please indicate why Union South Rate M1 customers are receiving a credit for the
   costs of Parkway Projects and Parkway Expansion Implemented in 2017 and 2018,
   but other classes e.g. M2 are not.

b) Is this projected to continue in 2022?

c) Please provide the percentage Parkway project costs and totals allocated to date to
   in-franchise and ex-franchise.

d) Provide the projections for 2022 and beyond, and the total.

e) Are the Parkway Project costs under or over-collected in the M12 and M12X Rates?
   Indicate the annual the amounts by year.

f) Which customers are benefitting from the over/under collection of Parkway Project
   costs. (e.g. Union South Customers)?

Response

a) The credit to Union South Rate M1 customers is a result of the shift of indirect costs
   away from the distribution-related function into the transmission-related function
   within the cost allocation study and the allocation of the income tax benefit

associated with the Project. The credit from the shift of indirect costs and the income tax benefit allocated to Rate M1 is greater than the allocation of project-related costs to Rate M1 resulting in a net credit of the Project allocated to the rate class.[1] By contrast, the credit from the shift of indirect costs and income tax benefit allocated to Rate M2 is less than the allocation of project-related costs to the rate class.

b) Yes, the credit to Union South Rate M1 customers is expected to remain in 2022.

c) & d) Please see Attachment 1.

e) The Parkway Project costs are included in rates based on the forecast revenue requirement of the projects. Any variance between actual project costs and the project costs included in rates is captured in the capital pass-through deferral accounts. The actual costs for 2021 are not known at this time and will be updated as part of the 2021 annual deferral proceedings.

Based on the most recent full year of actual costs for the Parkway Projects in 2019, the amount included in 2019 Rates for Rate M12 (including M12X) was higher than the actual costs by $1.013 million. The variance between actual costs and the amount included in rates of $1.013 million will be refunded to Rate M12 customers as part of the 2019 deferral account disposition proceeding (EB-2020-0134). Please see Table 1, line 3.

Table 1
2019 Actual Costs and Recovery of Capital Pass-through Parkway Projects

			2019 Recovery		
Line No.	Particulars ($000's)	2019 Actual Costs (1) (2)	Base Rates (3)	Deferral Account (2)	Variance
		(a)	(b)	(c)	(d) = (a - b - c)
1	Union South In-franchise	(5,159)	(4,528)	(631)	-
2	Union North In-franchise	639	846	(207)	-
3	Rate M12	102,022	103,035	(1,013)	-
4	Other Ex-franchise	771	785	(13)	-
5	Total	98,273	100,138	(1,865)	-

Notes:
(1)   Actual costs of Parkway Projects, including the Parkway Projects (Parkway West and Brantford-Kirkwall) and the 2016 and 2017 Dawn-Parkway Expansion Projects.
(2)   Including interest approved in the annual deferral and variance account disposition proceedings.
(3)   Excludes a credit of $0.062 million allocated to gas supply admin in base rates.

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[1] In 2021, the allocation of the Parkway Projects and 2017 Dawn-Parkway Expansion projects results in a net credit to Rate M1. The allocation of the 2016 Dawn-Parkway Expansion project is a net cost to Rate M1.

f) There is no benefit or over or under collection of Parkway Project costs in rates as all costs are trued-up through the annual deferral proceedings, as illustrated in the response to part e), Table 1 above.

Allocation of Parkway Projects, 2016 Dawn-Parkway Expansion, and 2017 Dawn-Parkway Expansion
Costs in Base Rates to Union Rate Zone In-franchise and Ex-franchise Rate Classes

Line No.	Particulars ($000's)	In-Franchise Rate Classes		Ex-Franchise Rate Classes		Total
		Total	(%)	Total	(%)	Total
		(a)	(b) = (a/e)	(c)	(d) = (c/e)	(e) = (a+c)
	Parkway Projects					
1	2014 (1)	(909)	329.4%	633	-229.4%	(276)
2	2015 (2)	(5,432)	-86.3%	11,728	186.3%	6,296
3	2016 (3)	(3,253)	-10.4%	34,430	110.4%	31,177
4	2017 (4)	(1,972)	-6.0%	34,587	106.0%	32,615
5	2018 (5)	(875)	-2.6%	34,514	102.6%	33,639
6	2019 (6)	(175)	-0.5%	34,275	100.5%	34,100
7	2020 (7)	653	1.9%	34,162	98.1%	34,815
8	2021 (8)	1,361	3.9%	33,940	96.1%	35,301
9	2022 (9)	1,953	5.5%	33,672	94.5%	35,625
10	2023 (9)	2,448	6.8%	33,365	93.2%	35,813
	2016 Dawn-Parkway Expansion					
11	2014	-	-	-	-	-
12	2015	-	-	-	-	-
13	2016 (3)	(3,201)	-468.5%	3,884	568.5%	683
14	2017 (4)	(2,163)	-7.4%	31,283	107.4%	29,121
15	2018 (5)	(1,218)	-4.0%	31,469	104.0%	30,251
16	2019 (6)	1,723	6.9%	23,336	93.1%	25,059
17	2020 (7)	2,412	9.4%	23,196	90.6%	25,609
18	2021 (8)	3,013	11.6%	23,011	88.4%	26,024
19	2022 (9)	3,511	13.3%	22,817	86.7%	26,328
20	2023 (9)	3,894	14.7%	22,643	85.3%	26,537
	2017 Dawn-Parkway Expansion					
21	2014	-	-	-	-	-
22	2015	-	-	-	-	-
23	2016 (3)	(2,807)	163.6%	1,091	-63.6%	(1,716)
24	2017 (4)	(11,144)	-164.9%	17,902	264.9%	6,758
25	2018 (5)	(9,272)	-21.7%	51,911	121.7%	42,639
26	2019 (6)	(5,293)	-12.9%	46,209	112.9%	40,916
27	2020 (7)	(3,101)	-7.1%	46,495	107.1%	43,394
28	2021 (8)	(1,312)	-2.9%	46,465	102.9%	45,153
29	2022 (9)	229	0.5%	46,265	99.5%	46,495
30	2023 (9)	1,492	3.1%	45,989	96.9%	47,480

Notes:
(1) EB-2013-0365, Rate Order, Working Papers, Schedule 10.
(2) EB-2014-0271, Rate Order, Working Papers, Schedule 10.
(3) EB-2015-0116, Rate Order, Working Papers, Schedule 10, p. 2.
(4) EB-2016-0245, Rate Order, Working Papers, Schedule 10, p. 2.
(5) EB-2017-0087, Rate Order, Working Papers, Schedule 10, p. 2.
(6) EB-2018-0305, Exhibit F1, Tab 2, Rate Order, Working Papers, Schedule 16, p. 3.
(7) EB-2019-0194, Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 14, p.3.
(8) EB-2020-0095, Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 14, p.3.
(9) Projected allocation for 2022 and 2023.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Energy Probe ("EP")

INTERROGATORY

Reference:

Exhibit B, Tab 1, Schedule 1, Plus Appendices Page 3 Table 1 and paragraphs 53 and
54; Exhibit D, Tab 2, Rate Order, Working Papers Schedule 1, Page 1; Exhibit D, Tab 2
Rate Order Working Papers Schedule 5

Preamble:

Energy Probe would like to better understand the increase in Revenue Requirement
and resulting increases in Rates for Union North and Union South

Question:

a) Please confirm that based on comparison of Revenue Requirement increases the
   major difference between EGD and Union Rate Zones are the Capital Pass-through
   and the PDO Charge.

b) Please provide a schedule or schedules for Rates R01, and M1 that shows how the
   $2.755 m overall increase in the 2021 RR for these classes is derived/allocated and
   results in the rate increases in excess of $10 and $8 per year respectively.

c) Does EGI believe that the rate increases for these classes are appropriate under
   Price Cap regulation? Please explain your answer.

Response

a) Not confirmed. The rate increase to the Union rate zone relative to the EGD rate
   zone is driven in part by the increase to the 2021 Capital Pass-through and PDO
   rate adjustments. The increase is also driven by changes in NAC. Please see
   Exhibit I.STAFF.3 part b) for a detailed breakdown of the bill impacts for each zone.

b) Please see Exhibit I.STAFF.3 part b).

The allocation of the 2021 Capital Pass-through change of $2.250 million is provided at Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 14.

The allocation of the 2021 PDO change of $0.505 million is provided at Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 11.

c) Yes. Enbridge Gas believes the rate increases for these rate classes are appropriate as they are derived in accordance with the approved rate setting mechanism for the 2019 to 2023 IRM term.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, Appendix A, Page 1 and
EB-2019-0194, Exhibit JT1.7, Attachment 3

Preamble:

We would like to understand better the management of the Parkway Delivery Obligation
and Commitment Incentive and Dawn-Parkway capacity.

Question:

Please describe the Policy in place for the eligibility for Parkway Delivery Commitment
Incentive as it applies to:

a) New direct purchase customers

b) Existing direct purchase customers with increasing forecasted consumption

c) Existing direct purchase customers with decreasing forecasted consumption

d) Existing direct purchase customers:
   i)   That have no consumption due to closure
   ii) Are returning to system gas

e) Please file the policy as published and available

Response

a) to e) The policy can be found on the Company's website at:
 https://www.uniongas.com/-/media/about-
us/policies/DCQ_South.pdf?la=en&hash=ED1DF28FB0911B74321682FF93A33CDED
E5A0F4D.

This policy applies to all new or existing Bundled-T (BT), T-Service (T1/T2/T3) and Unbundled (U2) Direct Purchase customers in Union South who are not eligible for Firm Billing Contract Demand. For new direct purchase customers or existing direct purchase customers with changing (either increasing or decreasing) forecasted consumption, please refer to the policy.

If an existing direct purchase customer with a Parkway Obligation has no consumption due to closure, the customer can terminate their contract with appropriate notice (at least 3 months prior to contract renewal) and return to system gas. Once a customer returns to system gas, they no longer have a Parkway obligation and do not qualify to receive the PDCI.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, Appendix A, Page 1 and
EB-2019-0194, Exhibit JT1.7, Attachment 3

Preamble:

We would like to understand better the management of the Parkway Delivery Obligation
and Commitment Incentive and Dawn-Parkway capacity.

Question:

Please describe the factors that contribute to the increase in the amount of PDO since
Nov. 19.

a) Please quantify each of the factors in the contribution to the increase.

Response

The factors that contribute to any change in PDO are new agreements, terminated
agreements or changes to agreements resulting from a change in Daily Contract
Quantity (DCQ). Since November 2019, PDO has increased by 10 TJ/d. This is a
result of 2 TJ/d of new agreements, (1) TJ/d of terminated agreements and 9 TJ/d of
increases to DCQ (growth).

ENBRIDGE GAS INC.

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, Appendix A, Page 1 and
EB-2019-0194, Exhibit JT1.7, Attachment 3

Preamble:

We would like to understand better the management of the Parkway Delivery Obligation
and Commitment Incentive and Dawn-Parkway capacity.

Question:

Please update EB-2019-0194, Exhibit JT1.7, Attachment 3 by providing the actual
2018/19 and 2019/20 figures along with those figures forecasted for 2020/21.

Response

Please see Attachment 1.

UNION RATE ZONES
Dawn to Parkway System Capacity and Demand, PDO Shift Details, and PDO Demand Revenue Difference

Line No.	Particulars (TJ/d)	2013 Forecast W13/14 (a)	W14/15 (b)	W15/16 (c)	W16/17 (d)	W17/18 (e)	W18/19 (f)	W19/20 (g)	Forecast W20/21 (h)
	Dawn-Parkway System								
	Included in Rates								
1	2013 Cost of Service (EB-2011-0210) Capacity	6,803	6,803	6,803	6,803	6,803	6,803	6,803	6,803
2	Incremental Dawn-Parkway Capacity (1)	-	-	433	876	1,332	1,332	1,332	1,332
3	Total	6,803	6,803	7,236	7,678	8,135	8,135	8,135	8,135
	Other Changes (No Impact to Rates)								
4	Other Dawn-Parkway Capacity Changes	-	(2)	(222)	(170)	(246)	(262)	(256)	(219)
	Annual Forecast								
5	Total Forecasted Dawn-Parkway Capacity (line 3 + line 4)	6,803	6,801	7,014	7,508	7,889	7,873	7,878	7,915
6	Total Forecasted Dawn-Parkway Demands	6,593	6,643	7,049	7,443	7,783	7,759	7,905	7,911
7	Forecast Dawn-Parkway Excess/(Shortfall) (line 5 - line 6) (2)	210 (3)	158	(35)	65	106 (4)	114	(27)	4

Notes:

(1) W15/16 - Incremental capacity resulting from the Brantford-Kirkwall / Parkway D Project of 433 TJ/d.
W16/17 - Incremental capacity resulting from the Dawn Parkway 2016 System Expansion Project of 443 TJ/d.
W17/18 - Incremental capacity resulting from the 2017 Dawn Parkway Project of 457 TJ/d.

(2) The PDO shift was reflected in Dawn-Parkway excess/(shortfall) beginning W15/16.

(3) The W13/14 forecast filed in Union's 2013 Cost of Service proceeding (EB-2010-0210) included 210 TJ/d of excess Dawn-Parkway capacity. In the EB-2011-0210 Decision, the Board accepted Union's forecast and regulatory treatment. Union's 2013 cost allocation study allocates Dawn-Parkway demand costs in proportion to distance weighted design day demands. The 2013 allocation resulted in approximately 84% of costs allocated to Union's ex-franchise rate classes and 16% to Union's in-franchise rate classes.

(4) As part of the 2017 Dawn-Parkway Project (EB-2015-0200), Union had forecast a surplus of 30,393 GJ/d on the Dawn-Parkway System following the completion of the project. As part of the EB-2015-0200 Settlement Agreement, Union agreed to market the surplus capacity in accordance with the Storage and Transportation Access Rule ("STAR") and credit the revenues to the project deferral account.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, Appendix B, Page 1, line 7

Preamble:

We would like to understand better the timing, impact on 2021 rates and the reasons behind the delay in the 2019 ESM Deferral Account disposition evidence.

Question:

a) What are the company's plans relative to the impact on 2021 rates?

b) What are the reasons behind the delay from the past several years?

Response

a) and b) Enbridge Gas filed the 2019 Utility Earnings and Disposition of Deferral and Variance Account Balances Application (EB-2020-0134) on September 3, 2020.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Federation of Rental-housing Providers of Ontario ("FRPO")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, Appendix B, Page 1, line 8

Preamble:

EGI's evidence states: "Commitment to post the design day Dawn-Parkway system capacity required for Union North, Union South and Enbridge Gas zones on an aggregated basis online as part of the Index of Transportation Customers."

Question:

Please clarify what is meant by ongoing in the status column.

a) If information is available, please describe location and ideally provide hyperlinks.

b) If not available, please provide additional clarification on remaining steps and timing.

Response

a) and b) The design day Dawn-Parkway system capacity required for Union North, Union South and Enbridge Gas zones as part of the Index of Transportation Customers is complete. The comment "Ongoing" shown in the status column is meant to indicate that the Index of Transportation Customers is updated monthly with the design day Dawn-Parkway system capacity updated annually.

The information is reported by the legacy utility and can be found on the Union Gas website under Informational Postings. On the website, choose the Storage and Transportation drop down and select Informational Postings. From there, on the left-hand side the Storage/Transport Customer report is included under "Index of Customers". (https://www.uniongas.com/storage-and-transportation/informational-postings/index-of-customers).

ENBRIDGE GAS INC.

Answer to Interrogatory from
London Property Management Association ("LPMA")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1

Question:

Please update Table 3 to reflect the most recent information available from Statistics Canada.

Response

Please see below for the updated Table 3.

The table has been updated with data available as of September the 2nd, 2020.

Indexes for July-September 2019 as well as for October-December 2019 were revised by Statistics Canada.

Table 3
Annual % change in GDP IPI FDD

Line No.	Particulars	Annual % Change in GDP IPI FDD (1)
1	January - March 2019	1.83%
2	April - June 2019	2.09%
3	July - September 2019	1.81%
4	October - December 2019	2.07%
5	Inflation Factor (Average % Change)	1.95%
6	Inflation Factor (Average % Change) rounded to one decimal place (2)	2.0%

Notes:

(1) Gross Domestic Product Implicit Price Index Final Domestic Demand, sourced from Statistics Canada CanSim Table 36-10-0106-01 (formerly CANSIM 380-0066).

(2) In EB-2019-0194, Decision on Settlement Proposal and Interim Rate Order, Exhibit N1, Tab 1, Schedule 1, December 5, 2019, p. 9, all parties agreed that in future years, Enbridge Gas will use an inflation factor that has only one decimal place.

ENBRIDGE GAS INC.

Answer to Interrogatory from
London Property Management Association ("LPMA")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, page 8

Question:

The OEB issued a decision on July 16, 2020 in relation to the EGI's 2021 DSM plans and budgets (EB-2019-0271). Are any changes or updates required related to the 2021 DSM Y factor costs or allocation of those costs as a result of the OEB decision? If yes, please update the appropriate portions of the evidence and explain any difference from the original filing.

Response

No, there are no changes or updates required to 2021 Rates as a result of Enbridge Gas's Application for Approval of Natural Gas DSM Plans for 2021 (EB-2019-0271). In the Decision, the Board approved the extension of the 2015-2020 DSM framework and the roll-forward of the 2020 DSM budget amounts for one year, which is consistent with the DSM budget amounts included in this application.

ENBRIDGE GAS INC.

Answer to Interrogatory from
London Property Management Association ("LPMA")

Interrogatory

Reference:

Exhibit D, Tab 1, Rate Order, Appendix B & Exhibit D, Tab 2, Rate Order, Appendix B

Question:

Other than the changes to rates noted in the evidence, are there any wording or other changes in any of the rate schedules? If so, please provide a list of any such changes along with the reason for the change(s).

Response

There are no changes to the EGD rate handbook or Union rate zone rate schedules related to the 2021 Rates application.

There are changes that are included in the 2021 rates schedules that have been recently approved by the Board in other EGI applications as noted below.

-   Owen Sound Reinforcement Leave to Construct and Rate M17 Application (EB-2019-0183) included the approval of a new Rate M17 rate schedule and applicability changes to Rate M9 and Rate T3.

-   2020 Federal Carbon Pricing Program Application (EB-2019-0247) included an administrative update to Rate T3, Rate M9 and Rate M10 to include the Federal Carbon Charge.

-   Community Expansion Project Applications[1] included an update to the approved Community Expansion Projects, including the SES charges and term expiry, listed on the applicable general service rate schedules.

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[1] EB-2017-0261 Scugog Island, EB-2019-0139 Chippewas of the Thames First Nation, EB-2019-0187 Saugeen First Nation, EB-2019-0188 North Bay – Northshore and Peninsula Roads.

ENBRIDGE GAS INC.

Answer to Interrogatory from
London Property Management Association ("LPMA")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, pages 10-11 & Exhibit D, Tab 1, Rate Order, Working Papers, Schedule 10

Question:

Please provide the data, equations and heating degrees used to support the 2020 and 2021 normalized average use for each region noted in notes (1) and (2) on page 2 of Schedule 10 referenced above.

Response

Please see Exhibit I.EP.2 a) for 2021 heating degree day forecast and the data and equations used to develop the forecast. Regarding the 2020 heating degree day forecast, please refer to EB-2019-0194, Exhibit KT1.3, Page 2-11.

ENBRIDGE GAS INC.

Answer to Interrogatory from
London Property Management Association ("LPMA")

Interrogatory

Reference:

Exhibit B, Tab 1, Schedule 1, page 11 & Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 13

Question:

Please provide the data, equations and heating degrees used to support the 2020 and 2021 normalized average use for each region noted in notes (2) and (3) on page 1 of Schedule 13 referenced above.

Response

The data and equations used to calculate the 2020 weather normal forecasts for Union South and Union North can be found at EB-2019-0194, Exhibit KT1.4.

The tables below show the data and equations used to calculate the 2021 weather normal forecasts using the Board-approved 50:50 methodology for the Union South and Union North rate zones, and the resulting statistical output.

2021 Weather Normal Forecast - 50:50 Method
Union South Rate Zone

	Annual HDD	30-Year Average	20-Year Trend	50:50 Normal HDD
	(1)	(2)	(3)	(4)=(2+3)/2
1990	3,571.5			
1991	3,631.2			
1992	4,030.7			
1993	4,104.9			
1994	4,054.8			
1995	3,987.0			
1996	4,152.5			
1997	4,005.1			
1998	3,174.9			
1999	3,553.5			
2000	3,791.6		3,693.8	
2001	3,468.6		3,697.9	
2002	3,652.1		3,702.0	
2003	3,988.1		3,706.2	
2004	3,806.6		3,710.3	
2005	3,837.5		3,714.4	
2006	3,407.4		3,718.5	
2007	3,699.9		3,722.6	
2008	3,869.1		3,726.7	
2009	3,824.1		3,730.9	
2010	3,573.6		3,735.0	
2011	3,695.1		3,739.1	
2012	3,274.2		3,743.2	
2013	3,874.6		3,747.3	
2014	4,221.1		3,751.4	
2015	3,834.2		3,755.5	
2016	3,509.8		3,759.7	
2017	3,562.4		3,763.8	
2018	3,839.0		3,767.9	
2019	3,929.2	3,764.1	3,772.0	
2020		3,764.1	3,776.1	
2021		3,764.1	3,780.2	3,772.2

Notes:
(2)   The 30-year average is based on years 1990 to 2019
(3)   The 20-year trend regression is based on years 2000 to 2019

20-YEAR TREND REGRESSION RESULTS: SUMMARY
OUTPUT

Regression Statistics	
Multiple R	11.0%
R Square	1.2%
Adjusted R Square	-4.3%
Standard Error	225.90
Observations	20

ANOVA

	df	SS	MS	F	Significance F
Regression	1	11,261.60	11,261.60	0.22	0.64
Residual	18	918,548.86	51,030.49		
Total	19	929,810.45			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	(4,536.55)	17,603.29	(0.26)	0.80	(41,519.69)	32,446.59
Trend	4.12	8.76	0.47	0.64	(14.29)	22.52

2021 Weather Normal Forecast - 50:50 Method
Union North Rate Zone

	Annual HDD	30-Year Average	20-Year Trend	50:50 Normal HDD
	(1)	(2)	(3)	(4)=(2+3)/2
1990	4,993.8			
1991	5,018.5			
1992	5,488.9			
1993	5,460.3			
1994	5,293.6			
1995	5,357.8			
1996	5,550.0			
1997	5,384.1			
1998	4,457.4			
1999	4,754.0			
2000	5,065.1		4,882.1	
2001	4,612.9		4,884.5	
2002	5,006.5		4,886.9	
2003	5,146.5		4,889.3	
2004	5,216.2		4,891.6	
2005	4,865.8		4,894.0	
2006	4,472.7		4,896.4	
2007	4,887.8		4,898.8	
2008	5,039.7		4,901.1	
2009	5,049.0		4,903.5	
2010	4,461.5		4,905.9	
2011	4,741.0		4,908.3	
2012	4,367.3		4,910.6	
2013	5,130.6		4,913.0	
2014	5,360.7		4,915.4	
2015	4,912.0		4,917.8	
2016	4,627.9		4,920.2	
2017	4,828.3		4,922.5	
2018	5,072.0		4,924.9	
2019	5,230.6	4,995.1	4,927.3	
2020		4,995.1	4,929.7	
2021		4,995.1	4,932.0	4,963.6

Notes:
(2)   The 30-year average is based on years 1990 to 2019
(3)   The 20-year trend regression is based on years 2000 to 2019

20-YEAR TREND REGRESSION RESULTS: SUMMARY
OUTPUT

Regression Statistics	
Multiple R	5.0%
R Square	0.3%
Adjusted R Square	-5.3%
Standard Error	287.54
Observations	20

ANOVA

	df	SS	MS	F	Significance F
Regression	1	3,757.18	3,757.18	0.05	0.83
Residual	18	1,488,212.10	82,678.45		
Total	19	1,491,969.28			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	128.22	22,406.56	0.01	1.00	(46,946.21)	47,202.65
Trend	2.38	11.15	0.21	0.83	(21.05)	25.80

ENBRIDGE GAS INC.

Answer to Interrogatory from
London Property Management Association ("LPMA")

Interrogatory

Reference:

Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 14

Question:

Has EGI made any changes in the allocations to rate classes of the capital pass through costs shown for any of the projects? If so, please explain any such changes.

Response

There has been no change to the cost allocation methodology for the capital pass-through projects. Enbridge Gas has updated the cost allocation of each project to reflect the 2021 revenue requirement in the current application.

ENBRIDGE GAS INC.

Answer to Interrogatory from
London Property Management Association ("LPMA")

Interrogatory

Reference:

Exhibit D, Tab 2, Rate Order, Working Papers, Schedule 9

Question:

Please confirm that the 2020 base revenue figures shown in column (a) exclude DSM related revenues. If this cannot be confirmed, please explain fully.

Response

Confirmed.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Greenhouse Vegetable Growers ("OGVG")

Interrogatory

Reference:

Exhibit B Tab 1 Schedule 1 Appendix A
Exhibit D Tab 2 Rate Order Working Papers Schedule 11 Page 1
EB-2013-0365, Union Gas Limited Settlement Agreement, Updated June 3, 2014,
Appendix B, page 2, paragraph 8

Preamble:

The evidence in the Application indicates that the Parkway Delivery Obligation ("PDO")
remains at a forecast level of 249 TJ/day.

The evidence in the Application indicates that the total PDO costs included in 2020
rates is $25,286,000, and the requested total PDO costs to be included in 2021 rates is
$25,792,000.

The PDO Settlement indicates the following:

*The equitable end-state which Union's ratepayers seek is one which either eliminates in
its entirety the PDO or, where it is more cost-effective to do so, calls for all ratepayers to
compensate DP customers upon whom a PDO is imposed and who deliver PDO
volumes at Parkway and sales service customers on whose behalf Union delivers
volumes at Parkway for the benefit conferred on Union's integrated system.*

Question:

a) Please provide the annual PDO expressed in TJ/day for the years 2014 (the year of
the PDO Settlement) to 2021.

b) Please provide the annual total PDO costs included in rates for the years 2014 to
2021.

c) Please explain why the PDO is proposed to continue to exist in 2021, including an explanation as to why its continued existence is more cost-effective then its elimination.

Response

a) – b) Please see Table 1.

PDO and PDCI Details

Line No.	Particulars ($000's)	PDO Volume (TJ/d) (1)	PDO Costs in Annual Rates		
			PDO Costs (2)	PDCI Costs (3)	Total Costs
		(a)	(b)	(c)	(d)
1	2014 (4)	450	-	-	-
2	2015	448	7,043	-	7,043
3	2016	472	7,491	-	7,491
4	2017	395	8,426	17,559	25,985
5	2018	309	11,431	13,044	24,475
6	2019	239	12,305	12,388	24,693
7	2020	250	12,521	12,766	25,286
8	2021	260	12,677	13,115	25,792

Notes:

(1) Parkway Delivery Obligation (PDO) at November 1 of the prior year as filed in the annual rates application. PDO volumes include PDO for direct purchase customers (including Halton Hills Generating Station) and sales service customers.

(2) PDO costs in annual rates weighted for changes in annual costs during the year. Excludes Parkway Obligation Rate Variance account balances, if any.

(3) Parkway Delivery Commitment Incentive (PDCI) effective November 1, 2016. Costs in annual rates weighted for changes in annual costs during the year. Excludes Parkway Obligation Rate Variance account balances, if any.

(4) PDO volumes as filed in EB-2013-0365 after the PDO shift effective April 1, 2014.

c) The PDO will exist in 2021 because there has been no Dawn to Kirkwall turnback that would facilitate a shift of all Union South direct purchase customers to a Dawn obligation point.[1] Elimination of the PDO would require an expansion of the Dawn

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[1] In accordance with The Settlement Framework for Reduction of Parkway Delivery Obligation (EB-2013-0365), Dawn to Kirkwall turnback is to be used to reduce the PDO.

Parkway System which would be a higher cost option than the current cost of the PDCI.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Ontario Greenhouse Vegetable Growers ("OGVG")

Interrogatory

Reference:

EB-2020-0095, Exhibit B Tab 1 Schedule 1, pages 9-10, paragraph 24
EB-2020-0067, Application for Clearance of 2017 and 2018 DSM related Accounts

Preamble:

While EGI is including 2017 and 2018 LRAM amounts in the calculation of 2021 rates, the 2017 and 2018 LRAM amounts appear to be before the Board in EB-2020-0067 for approval.

Question:

a) Please explain how any changes in the final 2017 and 2018 LRAM approved amounts as a result of the Board's decision in EB-2020-0067 will be accounted for if the Board were to approve 2021 rates based on the audited 2017 and 2018 LRAM amounts prior to the Board's determination in EB-2020-0067.

Response

a) Enbridge Gas has included 2017 and 2018 audited LRAM in 2021 Rates as reflected in the Evaluation Contractor's 2017 and 2018 Annual Verification Reports, without adjustment.

If the 2017 or 2018 LRAM changes as a result of the OEB's decision in EB-2020-0067 (2017 & 2018 DSM Deferral and Variance Account Disposition), Enbridge Gas will either reflect the final LRAM in 2021 Rates in the rate order for Phase 1 or record the variance in the LRAM deferral account, depending on the timing of the Board's Decision. Any change to the 2017 or 2018 LRAM amounts will have an immaterial impact on 2021 Rates.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Pollution Probe ("PP")

INTERROGATORY

Reference:

"… the 2021 Annual Update may show material differences from
expectations set in the 5 Year Plan and the 2020 Annual Update. Enbridge Gas expects
the Board and interested parties are eager to learn of the impacts COVID-19 will have
on the Company's gas supply plan, and expects review of a 2021 Annual Update
submitted in early 2021 will provide the insight sought." [Enbridge letter dated June 24,
2020 and filed in EB-2020-0135].

Question:

a) Enbridge requested a delay in filing of the 2020 updates to its Gas Supply Plan and
confirmed that material differences are expected for 2021. Please provide an
update on the status of the 2021 plan updates and a best estimate for the date it
will be filed.

b) Please summarize the Gas Supply Plan updates made or still required for 2021
since the OEB reviewed the last version of Enbridge's Gas Supply Plan in March
2020 (date of final Board Staff Report in EB-2019-0137).

c) Given the significant changes anticipated since the last Gas Supply Plan, how
does Enbridge plan to reflect those changes in its 2021 Rates application?

d) Please provide details on any 2021 Gas Supply Plan updates that impact gas
commodity and upstream transportation costs in 2021.

Response

a) to d) In accordance with the Board's letter dated July 6, 2020 in its Consultation to
Review Annual Update to Five-Year Natural Gas Supply Plans (EB-2020-0135 for
Enbridge Gas), Enbridge Gas will provide the 2021 update to its Gas Supply Plan by
February 1, 2021. Enbridge Gas is not seeking approval of changes to rates related
to the Gas Supply Plan in this proceeding in accordance with prior Board direction.
As per the Decision and Procedural Order No. 2, dated April 1, 2019 in the 2019

Rates application (EB-2018-0305), the Board stated that "[i]n the MAADs proceeding that determined the rate-setting framework for Enbridge Gas, the OEB made clear that there was a separate process for the review and assessment of gas supply plans".

ENBRIDGE GAS INC.

Answer to Interrogatory from
Pollution Probe ("PP")

INTERROGATORY

Reference:

[Ex. B, T1, Sch. 1]

Question:

a) Does Enbridge expect COVID related cost increases or reductions in 2021? If so, please provide details and references if they were included in this application.

b) Please provide details on any COVID related expenses expected to impact 2021 rates that are not included in this application.

c) Has Enbridge recorded any 2020 costs or savings to either of the COVID deferral accounts? If so, please provide amounts and details.

Response

a) to c) Please see Exhibit I.APPrO.1.

ENBRIDGE GAS INC.

Answer to Interrogatory from
Pollution Probe ("PP")

INTERROGATORY

Reference:

[Ex. B, T1, Sch.1]

Question:

Please explain why the rate increase for a typical residential customer in the Union Rate zones are approximately four to five times greater than that of the EGD rate zone.

Response

Please see Exhibit I.STAFF.3 b) and c).