

VOLUME FORECASTS

1. This evidence sets out Enbridge's 2018 forecast of natural gas volumes to ascertain the forecast of Greenhouse Gas ("GHG") obligation costs. Enbridge is required to prepare forecasts of the customer-related volumes and the Company facility-related volumes as part of its Cap and Trade compliance obligations. These forecasts are key inputs in the development of the Compliance Plan, and are necessary for the purposes of cost allocation and rate-setting.
2. Customer-related and facility-related volumetric forecasts were derived as consistent with Board-approved methodologies currently in effect under the Custom Incentive Regulation ("CIR") mechanism which was filed by Enbridge in the 2018 Rate Adjustment Application (EB-2017-0086).

Customer-related Volume Forecast

3. The total customer-related obligation was determined by using the 2018 volumetric natural gas forecast for all customers, adjusted for gas-fired generation, Demand Side Management ("DSM"), incremental customer-related abatement, mandatory and voluntary participants, as well as volumes derived from biomass, or consumed outside of Ontario. The derivation of the final customer-related obligation can be found in Table 1 of this exhibit.
4. The Company estimated the impact on volumetric consumption of the additional cost to Rate 1 and Rate 6 customers of Cap and Trade using its regression models as part of the Board-approved average use forecasting methodology. The

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volumetric impact from incremental Cap and Trade obligation costs is explained in the Company's Gas Volumes Forecast in the 2018 Rate Adjustment Application.¹

5. The forecast of natural gas sales and transportation volumes in Enbridge's 2018 Rate Application is 11,497,761 10^3m^3 , which excludes unbundled Rate 125 and Rate 300 customers. Evidence on Enbridge's 2018 customer gas volume forecast is set out in Exhibit C1, Tab 2, Schedule 1 in the 2018 Rate Application.
6. Under Ontario Regulation 144/16, The Cap and Trade Program (the "Regulation"), natural gas utilities are the point of regulation for natural gas fired power generators. This means that Enbridge is required to procure allowances to cover the volume of natural gas used by the natural gas fired power generators on its distribution system. Enbridge has a forecast for the unbundled Rate 125 and Rate 300 customers of 444,978 10^3m^3 , which is included in the volumes shown on Table 1 of this Exhibit. All of the 2018 forecast volumes for the unbundled power generator customers are provided by the customers during the budgeting process.
7. The volume in the 2018 Rate Application is after DSM volume reductions are applied. The total customer-related volume, including the forecast for unbundled customers and before DSM volumes are removed is 11,973,877 10^3m^3 , as shown on Table 1 of this exhibit. To provide transparency, DSM volumes have been shown separately in this application and constitute a partially effective volumetric reduction of 31,139 10^3m^3 .
8. In addition to the DSM volumes, the Framework also prescribes that customer-related abatement, which is incremental to the existing DSM plan, be shown

¹ EB-2017-0086, Exhibit C1, Tab 2, Schedule 1, Appendix C

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separately. Enbridge has received proceeds from the government of Ontario's Green Investment Fund ("GIF") to conduct customer-related abatement activity (outlined in more detail in Exhibit C, Tab 5, Schedule 1). The GIF-funded customer-related abatement is incremental to Enbridge's approved DSM plan. The volume reductions associated with this program are anticipated to be $5,558.5 \times 10^3 \text{m}^3$ in 2018.

9. As per the Regulation, mandatory participants, otherwise known as Large Final Emitters ("LFEs"), are customers with facilities that emit more than 25,000 tonnes of carbon dioxide equivalent ("tCO₂e") per year. Voluntary participants are customers with facilities that emit above 10,000 tCO₂e, but less than the mandatory participant level of 25,000 tCO₂e per year, and who voluntarily "opt-in" to the government's Cap and Trade program. Mandatory and voluntary participants are collectively referred to as "capped" participants who are responsible for their own customer-related Cap and Trade compliance obligations. Capped participants will be required to obtain allowances, either through free allocation from the Government or by purchasing allowances or offset credits to match their annual GHG emissions. These customers will not be billed for customer-related obligations by Enbridge.
10. Volumetric forecasts were provided for those facilities that are on a list of capped participants in 2017, posted by the Ministry of the Environment and Climate Change ("MOECC") on its website on September 8, 2017. This list includes mandatory and voluntary participants who are registered capped participants for 2017 as well as any new voluntary participants who have registered to opt-in starting in 2018.
11. In June of 2017, Enbridge reached out to customers not classified as capped participants for 2017, which based on natural gas volumes, may be eligible to opt-in

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to Cap and Trade in 2018. The current customer Declaration Form is attached as Appendix A to this Exhibit.

12. The total amount forecasted for all capped participants known to Enbridge as of October 5, 2017, is 1,175,801 10^3m^3 . This amount was subtracted from the 2018 total forecast gas volume.
13. As per the Regulation, Enbridge is not required to acquire GHG allowances associated with the use of natural gas derived from biomass, such as landfill gas. The Company is not forecasting any landfill gas billed on Rate 300 in 2018.
14. Enbridge is not required to acquire GHG allowances for natural gas distributed to downstream natural gas distribution companies, including those that are out of province like Gazifère which is an Enbridge subsidiary in Québec. The total amount forecast for Gazifère in 2018 is 169,764 10^3m^3 , billed on Rate 200. This amount was subtracted from the 2018 total forecast gas volume.
15. With the exclusions of total volumes of 1,345,565 10^3m^3 as noted in the preceding paragraphs, the total customer-related volume is 10,591,615 10^3m^3 .

Facility-Related Volume Forecast

16. The forecast of gas volumes for Enbridge's facility-related obligations is based on forecast requirements of the amount of natural gas required for Enbridge to operate its facilities as well as the emissions from the distribution of natural gas. This represents Company use volumes (natural gas used for boilers at distribution gate stations, building heating, natural gas fleet vehicles, etc.) as well as compressor fuel related to natural gas storage and unaccounted for gas ("UFG" or "UAF") as

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reflected in part in the Company's Gas Cost to Operations and System Requirements in the 2018 Rate Adjustment Application.

17. In total, Enbridge forecasts its facility-related gas volumes for 2018 to be 128,649 10^3m^3 . A detailed breakdown of forecast facility-related gas volumes is provided in Table 2 of this evidence.

Total 2018 Volume Forecast

18. The total volume forecast, inclusive of both the customer-related and Company facility-related volumes, is 10,720,264 10^3m^3 . A summary of all of the volumes included in this calculation is included in Table 3 of this evidence.

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TABLE 1: 2018 CUSTOMER-RELATED VOLUMES BY RATE CLASS
 (10³m³)

Line	Rate	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7
		Forecast Volumes Before DSM & Abatement	DSM Volume	Customer Abatement Volume ¹	Forecast Volumes After DSM & Abatement ²	Capped Participant Volumes	Other Exempt Gas Volume ⁴	Net Volumes (Col. 4 - Col. 5 - Col. 6)
1.1	1	4,767,354.0	6,807.5	5,558.5	4,754,988.0	364.1	0.0	4,754,623.9
1.2	6	4,847,873.1	18,080.4	0.0	4,829,792.7	156,649.9	0.0	4,673,142.8
1.3	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.4	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1.5	110	791,896.2	2,860.4	0.0	789,035.8	367,138.0	0.0	421,897.8
1.6	115	545,114.9	2,283.5	0.0	542,831.4	410,350.3	0.0	132,481.1
1.7a	125	319,562.5	0.0	0.0	319,562.5	0.0	0.0	319,562.5
1.7b	125D ³	124,896.5	0.0	0.0	124,896.5	0.0	0.0	124,896.5
1.8	135	64,592.0	90.7	0.0	64,501.3	0.0	0.0	64,501.3
1.9	145	50,543.0	406.8	0.0	50,136.2	3,670.7	0.0	46,465.5
1.10	170	291,761.7	609.4	0.0	291,152.3	237,627.7	0.0	53,524.6
1.11	200	169,764.4	0.0	0.0	169,764.4	0.0	169,764.4	0.0
1.12	300	518.6	0.0	0.0	518.6	0.0	0.0	518.6
Total								
1	Customer-Related	11,973,876.9	31,138.7	5,558.5	11,937,179.7	1,175,800.7	169,764.4	10,591,614.6

Notes:

(1) Incremental customer abatement included in Compliance Plan.

(2) Forecast Volumes After DSM and Abatement are higher than volumes filed in 2018 Rates Application (EB-2017-0086, Exhibit C3, Tab 2, Schedule 1) due to inclusion of unbundled volumes for Rate 125 and Rate 300 (Lines 1.7 a & b, and 1.12) for compliance. Volumes forecast filed in 2018 Rates Application will be updated to reflect forecast of customer abatement volume in Col. 3 above.

(3) Dedicated unbundled customers

(4) Includes volumes delivered to downstream distributor and landfill gas.

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TABLE 2: 2018 FACILITY-RELATED VOLUMES
(10³m³)

<u>Line</u>		<u>Volumes</u>
1.	Company Use - Buildings	1,388.8
2.	Company Use - Boilers	4,078.8
3.		5,467.6
4.	Company Use - Fleet	1,147.2
5.	Total Company Use	6,614.8
6.	Unaccounted For Gas (UAF)	106,077.0
7.	Compressor Fuel	15,957.3
8.	Total Facility-Related	128,649.1

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TABLE 3: 2018 SUMMARY OF CUSTOMER-RELATED AND FACILITY-RELATED FORECAST VOLUMES

<u>Line</u>	<u>Description</u>	<u>2018 Forecast</u>
<u>Customer-Related Volume Forecast</u>		
1	Gross Volumes before DSM and Customer Abatement (10 ³ m ³)	11,973,877
2	Less: Demand Side Management (DSM) (10 ³ m ³)	(31,139)
3	<u>Less: Customer Abatement (10³m³)</u>	<u>(5,559)</u>
4	Subtotal: Net Volumes (10 ³ m ³)	11,937,180
5	Less: Throughput to Capped Participants (10 ³ m ³)	(1,175,801)
6	<u>Less: Gas to Other Exempt Customers (10³m³)</u>	<u>(169,764)</u>
7	Net Customer Related Volumes to end users (10³m³)	10,591,615
<u>Facility-Related Volume Forecast</u>		
8.a.	Company Use Gas - Building (10 ³ m ³)	1,389
8.b.	Company Use Gas - Boiler (10 ³ m ³)	4,079
8.c.	<u>Company Use Gas - Fleet (10³ m³)</u>	<u>1,147</u>
8	Total Company Use Gas (10 ³ m ³)	6,615
9	Unaccounted for Gas (10 ³ m ³)	106,077
10	<u>Compressor Fuel (10³m³)</u>	<u>15,957</u>
11	Net Facility-Related Volumes (10³m³)	128,649
12	<u>Total Customer-Related and Facility-Related Volumes (Line 7 + Line 11) (10³m³)</u>	<u>10,720,264</u>

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