

VOLUME FORECASTS

1. This evidence sets out Enbridge's 2017 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 recently used by Enbridge in its 2017 Rate Application (EB-2016-0215, Exhibit C1, Tab 2, Schedule 1).

Customer-Related Volume Forecast

3. The total Customer-related obligation was determined by using the 2017 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 those 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 forecast of natural gas sales and transportation volumes in Enbridge's 2017 Rate Application is 11,752,200 10^3m^3 , which excludes unbundled Rate 125 and Rate 300 customers. Evidence on Enbridge's 2017 customer gas volume forecast is set out in Exhibit C1, Tab 2, Schedule 1 of EB-2016-0215.

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5. 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 developed a forecast for the unbundled Rate 125 and Rate 300 customers of $631,427 \text{ } 10^3\text{m}^3$, which is included in the volumes shown on Table 1 of this exhibit. Although the Company’s grassroots forecast methodology for contract market customers includes power generators, the nature of Rate 125 contracts only require a forecast of peak demand, not annual demand. As a result, not all Rate 125 volumes included for the purpose of forecasting obligation were provided by customers. In cases where a customer declined to provide an annual forecast, historical consumption was used. In the future, Enbridge will continue to work with its customers and endeavor to work with the Independent Electricity System Operator (“IESO”) to develop a more accurate annual forecast for the power generators.

6. The volume in the 2017 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 $12,411,973 \text{ } 10^3\text{m}^3$, as shown on Table 1 of this exhibit. To provide transparency, DSM volumes have been shown separately in this application and constitute a $28,445 \text{ } 10^3\text{m}^3$ partially effective volumetric reduction.

7. In addition to the DSM volumes, the Framework also prescribes that customer-related abatement, which is incremental to the existing DSM plan, be shown separately. Enbridge has received proceeds from the government’s Green Investment Fund (“GIF”) to conduct customer-related abatement activity (outlined in

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more detail in Exhibit C, Tab 2, Schedule 1). The GIF-funded customer-related abatement is incremental to anything that has been built into volumes for 2017 and incremental to Enbridge's approved DSM plan. The volume reductions associated with this program have not been included in Table 1, as they are minor relative to the total volumes and are not confirmed at this time. It is anticipated that the volume reduction will be approximately $13,000 \text{ } 10^3 \text{ m}^3$, however, this is a test case on reporting and submitting verified volume reductions and will be documented in the annual monitoring and reporting submitted to the Board and used for true up purposes.

8. 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 Cap and Trade compliance obligations. Capped participants will be required to obtain allowances, either through free allocation from the Government or by purchasing allowances, to match their annual GHG emissions. These customers will not be billed for Customer-related obligations by Enbridge.
9. Volumetric forecasts were provided for those facilities that are on a draft Capped Participants List that was provided to Enbridge by the Ministry of the Environment and Climate Change ("MOECC") on October 7, 2016. This list includes mandatory participants, or LFEs, and voluntary participants who were known to MOECC as of

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October 7, 2016. As this date is prior to the registration deadline of November 30, 2016 for mandatory participants, this list is subject to change.

10. Where customers on the Capped Participants List had multiple locations or multiple meters, customers were contacted by Enbridge's Account Executives to clarify which locations and meters are included in the customers' GHG reporting and therefore included in the customers' Cap and Trade obligations. The total amount forecasted for all capped participants known as of October 7, 2016, is 1,024,744 10^3m^3 . This amount was subtracted from the 2017 total forecast gas volume.
11. In November, Enbridge reached out more formally to customers who are capped participants with a customer Cap and Trade Declaration Form. The form will create a second layer of confidence in the forecasted GHG emission obligation. The customer Declaration Form is attached as Appendix A to Exhibit B, Tab 2, Schedule 1.
12. 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 total amount forecasted for landfill gas is 34,992 10^3m^3 as billed on Rate 300. This amount was subtracted from the 2017 total forecast gas volume.
13. Similarly, 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. Subsequently, the total amount forecasted for Gazifère is 170,843 10^3m^3 as billed on Rate 200. This amount was subtracted from the 2017 total forecast gas volume.

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14. With the exclusions of total volumes of 1,230,579 10^3m^3 as noted in the preceding paragraphs, the total customer-related volume is 11,152,950 10^3m^3 .

Facility-Related Volume Forecast

15. 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. 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 reflected in part in the Company's Gas Cost to Operations and System Requirements (EB-2016-0215, Exhibit D1 Tab 2 Schedule 5).
16. In total, Enbridge forecasts its facility-related gas volumes for 2017 to be 122,407 10^3m^3 . A detailed breakdown of forecast facility-related gas volumes is provided in Table 2 of this evidence.

Total 2017 Volume Forecast

17. The total volume forecast, inclusive of both the customer-related and Company facility-related volumes, is 11,275,357 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: 2017 CUSTOMER-RELATED VOLUMES
 (10³m³)

Line	Rate	Col. 1 Budget Forecast Volumes Before DSM	Col. 2 DSM Volume	Col. 3 Customer Abatement Volume	Col. 4 Capped Participant Volumes	Col. 5 Other Exempt Gas Volume ¹	Col. 6 Net Volumes ²
1.1	1	4,917,009.6	5,531.7	0.0	0.0	0.0	4,911,477.9
1.2	6	4,879,281.2	17,012.0	0.0	120,126.9	0.0	4,742,142.3
1.3	9	262.8	0.0	0.0	0.0	0.0	262.8
1.4	100	0.0	0.0	0.0	0.0	0.0	0.0
1.5	110	864,132.9	2,698.1	0.0	403,080.8	0.0	458,354.0
1.6	115	492,449.6	2,157.7	0.0	304,439.5	0.0	185,852.4
1.7a	125	305,896.4	0.0	0.0	0.0	0.0	305,896.4
1.7b	125D ³	325,082.3	0.0	0.0	0.0	0.0	325,082.3
1.8	135	60,984.4	85.4	0.0	0.0	0.0	60,899.0
1.9	145	63,702.7	384.5	0.0	14,091.0	0.0	49,227.2
1.10	170	296,888.2	575.2	0.0	183,005.6	0.0	113,307.4
1.11	200	170,842.7	0.0	0.0	0.0	170,842.7	0.0
1.12	300	35,440.4	0.0	0.0	0.0	34,992.0	448.4
1	Total Customer-Related	12,411,973.2	28,444.6	0.0	1,024,743.8	205,834.7	11,152,950.1

Notes:

(1) Includes volumes delivered to downstream distributor and landfill gas

(2) Col. 1 - Col. 2 - Col. 3 - Col. 4 - Col. 5

(3) Dedicated unbundled customers

TABLE 2: 2017 FACILITY-RELATED VOLUMES
 (10³m³)

Line	<u>Volumes</u>
1.	Company Use - Buildings 1,505.9
2.	Company Use - Boilers 3,930.2
3.	5,436.2
4.	Company Use - Fleet 1,500.0
5.	Total Company Use 6,936.2
6.	Unaccounted For Gas (UAF) 98,279.0
7.	Compressor Fuel 17,191.8
8.	Total Facility-Related 122,407.0

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TABLE 3: 2017 SUMMARY OF CUSTOMER-RELATED AND FACILITY-RELATED FORECAST VOLUMES

<u>Line</u>	<u>Description</u>	<u>2017 Forecast</u>
<u>Customer-Related Volume Forecast</u>		
1	Gross Volumes before DSM and Customer Abatement (10^3m^3)	12,411,973
2	Less: Demand Side Management (DSM) (10^3m^3)	(28,445)
3	<u>Less: Customer Abatement (10^3m^3)</u>	<u>0</u>
4	Subtotal: Net Volumes (10^3m^3)	12,383,529
5	Less: Throughput to Capped Participants (10^3m^3)	(1,024,744)
6	<u>Less: Gas to Other Exempt Customers (10^3m^3)</u>	<u>(205,835)</u>
7	Net Customer Related Volumes to end users (10^3m^3)	11,152,950
<u>Facility-Related Volume Forecast</u>		
8.a.	Company Use Gas - Building (10^3m^3)	1,506
8.b.	Company Use Gas - Boiler (10^3m^3)	3,930
8.c.	<u>Company Use Gas - Fleet (10^3m^3)</u>	<u>1,500</u>
8	Total Company Use Gas (10^3m^3)	6,936
9	Unaccounted for Gas (10^3m^3)	98,279
10	<u>Compressor Fuel (10^3m^3)</u>	<u>17,192</u>
11	Net Facility-Related Volumes (10^3m^3)	122,407
12	<u>Total Customer-Related and Facility-Related Volumes (Line 7 + Line 11) (10^3m^3)</u>	<u>11,275,357</u>

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