Ontario Energy Board P.O. Box 2319 27th. Floor 2300 Yonge Street Toronto ON M4P 1E4 Telephone: 416- 481-1967 Facsimile: 416- 440-7656 Toll free: 1-888-632-6273 Commission de l'Énergie de l'Ontario C.P. 2319 27e étage 2300, rue Yonge Toronto ON M4P 1E4 Téléphone; 416- 481-1967 Télécopieur: 416- 440-7656 Numéro sans frais: 1-888-632-6273



**BY EMAIL** 

May 31, 2018

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

Dear Ms. Walli:

Re: 2018 Natural Gas Utilities' Cap and Trade Compliance Plans OEB Staff Submission Enbridge Gas Distribution Inc. – EB-2017-0224 Union Gas Limited – EB-2017-0255 EPCOR Natural Gas Limited Partnership – EB-2017-0275

In accordance with Procedural Order No. 4, please find attached OEB staff's submission on the evidence that forms part of the public record in the above noted proceeding.

The applicants and intervenors have been copied on this filing.

Sincerely,

**Original Signed By** 

Valerie Bennett Project Advisor, Application Policy & Climate Change

Attachment



## **ONTARIO ENERGY BOARD**

## OEB STAFF SUBMISSION May 31, 2018

Natural Gas Utilities' 2018 Cap and Trade Compliance Plans

Enbridge Gas Distribution Inc. – EB-2017-0224 Union Gas Limited – EB-2017-0255 EPCOR Natural Gas Limited Partnership – EB-2017-0275

## Background

The Climate Change Mitigation and Low-carbon Economy Act, 2016 (Climate Change Act) was passed by the Ontario Legislature and received Royal Assent on May 18, 2016. On May 19, 2016, Ontario Regulation 144/16, The Cap and Trade program (Cap and Trade Regulation), was issued. The Climate Change Act and the Cap and Trade Regulation set forth the details of a Cap and Trade program for the purpose of reducing greenhouse gas (GHG) emissions in Ontario. The Climate Change Act established that the first compliance period for the Cap and Trade program will run from January 1, 2017 until December 31, 2020, with subsequent three-year compliance periods.

Under the *Climate Change Act*, Union Gas Limited (Union Gas), Enbridge Gas Distribution Inc. (Enbridge Gas) and EPCOR Natural Gas Limited Partnership (EPCOR) (collectively, the Gas Utilities) are required to develop strategies to meet their *Climate Change Act* compliance obligations. New costs will be incurred by the Gas Utilities to comply with the *Climate Change Act*. The Ontario Energy Board (OEB) is responsible for assessing the cost consequences of the Gas Utilities' Cap and Trade Compliance Plans for the purpose of approving cost recovery in rates.

The Gas Utilities each filed an application with the OEB seeking approval of the forecast costs arising from their cap and trade Compliance Plan for the January 1 - December 31, 2018 time period. The Gas Utilities filed their applications in accordance with the OEB's *Report of the Board – Regulatory Framework for Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities* (Cap and Trade Framework).<sup>1</sup>

## Confidentiality

The *Climate Change Act* outlines limitations on the disclosure of certain information. These limitations are reflected in Section 4 of the Cap and Trade Framework.<sup>2</sup> The Cap and Trade Framework indicates that there are three categories of information which may be included within the Gas Utilities Compliance Plans: public information, confidential information and strictly confidential information.

<sup>&</sup>lt;sup>1</sup> EB-2015-0363

<sup>&</sup>lt;sup>2</sup> Climate Change Mitigation and Low-carbon Economy Act, 2016, S.O. 2016, CHAPTER 7 (Climate Change Act) and EB-2015-0363 Report of the Board - Regulatory Framework for Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities (Cap and Trade Framework).

The Cap and Trade Framework provides for two categories of strictly confidential information which arise out of the *Climate Change Act* and *Cap and Trade Regulation* namely, auction confidential and market sensitive information. Strictly confidential information is subject to review by only OEB staff and the OEB panel assigned to review and decide the application.<sup>3</sup>

## Scope of OEB Staff Submission

This OEB staff submission is related to the Gas Utilities' evidence which is on the public record. OEB staff will subsequently submit a strictly confidential submission to the OEB and each of the respective Gas Utilities related to the strictly confidential portions of their Compliance Plans.

OEB staff provides its submissions on the following issues:

- Cost Consequences (Administrative Costs) Issue 1
- Volumetric Forecasts Issue 1.1
- GHG Emissions Forecasts Issue 1.2
- Carbon Price Forecast Issue 1.3
- Performance Metrics and Cost Information Issue 1.6
- Longer-Term Investments Issue 1.8
- New Business Activities Issue 1.9
- Greenhouse Gas Abatement Activities Issue 1.10
- Monitoring and Reporting Issue 2
- Customer Outreach Issue 3
- Deferral and Variance Accounts Issue 4
- Cost Recovery Issue 5
- Implementation Issue 6

## Issue 1 – Cost Consequences

## 1 – Total Cost Consequences

## Background

As natural gas distributors, the Gas Utilities need to develop strategies to meet their *Climate Change Act* compliance obligations. These obligations have associated costs, which include:

<sup>&</sup>lt;sup>3</sup> Cap and Trade Framework, pp. 9-13

- Facility-related obligations for facilities owned or operated by the Gas Utilities
- Customer-related obligations for natural gas-fired generators and residential, commercial and industrial customers who are not Large Final Emitters (LFEs) or voluntary participants
- Administrative costs to meet their compliance obligations •

The Gas Utilities' 2018 Compliance Plan costs consist of Customer-Related Obligation Costs, Facility-related Obligation Costs, and Administrative Costs, shown below.

	Enbridge Gas⁴	Union Gas⁵	EPCOR <sup>6</sup>
2018 Customer-Related Obligation Costs	\$377,052,654	\$274,210,000	\$1,081,229
2018 Facility-Related Obligation Costs	\$4,604,398	\$8,584,000	\$30,852
2018 Administrative Costs <sup>7</sup>	\$5,651,000	\$5,734,000	\$157,050
Total 2018 Cost	\$387,308,052	\$288,528,000	\$1,112,081

Table 1: Gas Utility Compliance Plan Cost Forecast Summary Table

OEB-approved customer-related and facility-related obligation costs will be recovered in rates while administrative costs, including those related to the Low Carbon Initiative Fund (LCIF) for Enbridge Gas and Union Gas, will be captured in each gas utility's GHG Emissions Impact Deferral Account (GGEIDA) for future disposition.

## **OEB Staff Submission**

OEB submits that the overall cost consequences of the Gas Utilities' 2018 Compliance Plan costs are reasonable, with the exception of the following elements:

- Enbridge Gas' and Union Gas' proposed incremental staffing resources for 2018 should not be approved, with the exception of one incremental full time equivalent (FTE) for the LCIF for each of Enbridge Gas and Union Gas
- Enbridge Gas' and Union Gas' proposed 2018 consulting budgets should be capped at the 2017 actual levels
- A disallowance of \$700,000 for each of Enbridge Gas and Union Gas because no incremental customer abatement was included in their 2018 plans when costeffective potential was available

<sup>&</sup>lt;sup>4</sup> Exhibit G, T1, S1, Appendix A, pp. 1-2 and Exhibit D, T1, S1, p. 3, Exhibit I.4.EGDI.SEC.20

<sup>&</sup>lt;sup>5</sup> EB-2017-0255, Exhibit 7, Tab 1, Schedule 1, p. 1, EB-2017-0255, Argument-in-Chief, p. 73 <sup>6</sup> Staff IR EPCOR PUBLIC #6, Schedule "A": Updated Table

<sup>&</sup>lt;sup>7</sup> Includes Low Carbon Initiative Fund for Enbridge Gas and Union Gas.

• The proposed LCIF budget of \$2 million for each of Enbridge Gas and Union Gas should be reduced to \$750,000

Union Gas in Argument-in-Chief submitted that it would be inappropriate for the OEB to determine that the cost consequences of the 2018 Compliance Plan are just and reasonable, only to then disallow those costs at disposition absent a change in circumstances. Thus, Union Gas suggested that the nature of the OEB's review at disposition will be to determine: (a) whether the costs sought to be recovered are the consequence of the approved plan, and (b) whether there were any change in circumstances that rendered compliance with the approved plan unreasonable.<sup>8</sup>

OEB staff is of the view that Union Gas' position is inconsistent with the Cap and Trade Framework which provides for annual monitoring and reporting to assess the results of the Gas Utilities' cap and trade activities. These annual monitoring reports are to align with the OEB's annual review of the Gas Utilities' cap and trade costs.<sup>9</sup> Although the OEB may find that Union Gas' proposed Compliance Plan is reasonable, a determination related to the actual costs incurred can only happen at the time that Union Gas seeks disposition of its deferral and variance accounts in a future Compliance Plan proceeding.

## 2 – Administrative Costs

## Background

The Gas Utilities will incur administrative costs in 2018 related to their respective 2018 Compliance Plans. The Gas Utilities are seeking a determination that their proposed 2018 administrative costs are reasonable. The Gas Utilities will track respective administrative costs incurred from January 1 to December 31, 2018 in the 2018 GGEIDA and seek disposition of actual 2018 GGEIDA costs at a later date.

The actual 2017 and forecast 2018 administrative costs for each of the Gas Utilities are shown out in the Table below.

<sup>&</sup>lt;sup>8</sup> EB-2017-0255, Argument-In-Chief, p. 6, #11

<sup>&</sup>lt;sup>9</sup> Cap and Trade Framework, p. 37

	Enbridge Gas <sup>10</sup>		Union Gas <sup>11</sup>		EPCOR <sup>12</sup>	
Administrative Cost Item	2017	2018	2017	2018	2017	2018
Staffing Resources (Salaries and Wages)	\$0.69	\$1.50	\$2.44	\$2.33	-	\$0.03
Consulting and Market Intelligence	\$0.16	\$0.40	\$0.24	\$0.42	\$0.08	\$0.08
Bad Debt Provision	\$0.60	\$0.96	\$0.14	\$0.43	-	-
External Legal Counsel	\$0.36	\$0.40	\$0.04	\$0.15	\$0.01	\$0.01
IT Billing System (Revenue Requirement on Capital)	\$0.10	\$0.19	\$0.09	\$0.19	-	\$0.02
OEB Costs	\$0.32	\$0.10	\$0.11	\$0.05	-	-
Other (Travel, Market Research, Communications)	\$0.02	\$0.06	\$0.10	\$0.06	\$0.005	\$0.01
GHG Reporting and Verification	\$0.01	\$0.04	\$0.06	\$0.10	-	\$0.007
Customer Education and Outreach	\$0.01	\$0	\$0.002	\$0.008	\$0.005	-
SUB-TOTAL	\$2.27	\$3.65	\$3.22	\$3.73	\$0.10	\$0.16
Low Carbon Initiative Fund	-	\$2.00	-	\$2.00	-	-
TOTAL	\$2.27	\$5.65	\$3.22	\$5.73	\$0.10	\$0.16

Table 2 – 2017 (Actual) and 2018 (Forecast) Gas Utility Administrative Costs (million \$)\*

\*figures may differ slightly from references due to rounding

Enbridge Gas estimates its 2018 administrative costs to be \$5.65 million, inclusive of the \$2 million requested for the LCIF, which is discussed later in this submission.

Union Gas estimates its 2018 administrative costs to be \$5.73 million, inclusive of the \$2 million requested for the LCIF.

EPCOR estimates its 2018 administrative costs to be \$0.16 million.

<sup>&</sup>lt;sup>10</sup> EB-2017-0224, Exhibit I.4.EGDI.SEC.20

<sup>&</sup>lt;sup>11</sup> EB-2017-0255, Exhibit B.SEC.15, updated based on revised 2018 Salary & Wages outlook in Undertaking J1.1

<sup>&</sup>lt;sup>12</sup> EB-2017-0330, Exhibit 3, p. 22, Table 12

## Proposed Staff Resources and Consulting Costs

OEB staff will address two central elements of the Gas Utilities' proposed 2018 Administrative Costs; proposed staffing resources and consulting costs.

The table below shows the FTE and consulting costs for the Gas Utilities in 2016 and 2017 (actuals) and 2018 (proposed).

	Enbridge Gas			Union Gas			EPCOR	
	2016	2017	2018	2016	2017	2018	2017	2018
FTEs	2.8	4.4	8.0	8.0	10.0	11.25	0	0.5
Market Intelligence & Consulting Support (\$m)	\$0.268	\$0.157	\$0.40	\$0.264	\$0.236	\$0.42	\$0.08	\$0.077

Table 3 – 2016, 2017 (actuals) and 2018 (proposed) FTEs and Consulting Costs<sup>13,14</sup>

Enbridge Gas noted that its 2017 staffing levels did not reflect a full FTE complement for the full year as it has been evolving staffing requirements to meet cap and trade implementation needs and did not have the opportunity to fully staff up as necessary.<sup>15</sup> Enbridge submitted that there are two key drivers for the need for additional staffing resources: the increased complexity of the Cap and Trade market with Ontario joining the Western Climate Initiative (WCI); and, Enbridge Gas' recognition of the need to fully consider promising initiatives and technologies using the proposed LCIF funding.<sup>16</sup>

Enbridge noted that the higher forecast consulting costs for 2018 above its 2017 actual costs is the result of the increased complexity of the Cap and Trade market. Further, Enbridge Gas indicated that it anticipates requiring support towards developing the 2019-2020 Compliance Plan and responding to various regulatory updates and/or offset protocols.<sup>17</sup>

Union Gas noted that its proposed 2018 staffing level reflects the incremental level of effort it expects to require to administer the Cap and Trade program in 2018. Union Gas further stated that across its organization, a number of staff are undertaking Cap and Trade related work, however, if a minimum of 25% of an employee's time is not

<sup>&</sup>lt;sup>13</sup> EB-2017-0255, Exhibit B.SEC.15, with Union Gas' FTEs reduced from 12.5, based on Undertaking J1.1.

 $<sup>^{14}</sup>$  EB-2017-0275, Exhibit 3, p. 22 and Response to OEB staff IR#1 a) and c).

<sup>&</sup>lt;sup>15</sup> EB-2017-0224, Enbridge Gas Argument-in-Chief, p. 8

<sup>&</sup>lt;sup>16</sup> EB-2017-0224, Enbridge Gas Argument-in-Chief, p. 9

<sup>&</sup>lt;sup>17</sup> EB-2017-0224, Exhibit I.1.EGDI.Staff.12

dedicated to Cap and Trade, an allocation of that FTE is not included within the 2018 proposal. <sup>18</sup>

Union Gas noted that its total 2018 consulting forecast was completed early in 2017 to align with the corporate budgeting process. At that time, Union Gas had very little experience in the Cap and Trade market. Costs were therefore estimated to be similar in magnitude to the 2017 consulting forecast.<sup>19</sup>

EPCOR has proposed 0.5 FTE be included as part of its 2018 Compliance Plan. EPCOR noted that is necessary due to an increase in workload related to responding to inquiries, monthly reporting and an overall increase in work across the utility.

EPCOR's consulting costs relate to the retention of Blackstone Energy Services Inc. on a two-year agreement to assist in providing full market analysis, partial oversight and development of its procurement strategy.<sup>20</sup>

## **OEB Staff Submission**

OEB staff submits that no incremental FTEs, above 2017 actual levels, should be approved at this time, with the exception of one incremental FTE for each of Enbridge Gas and Union Gas with respect to the LCIF. The two utilities did not adequately justify the need for additional staff beyond 2017 levels.

Therefore, the OEB should only find it appropriate that Enbridge Gas proceed with 4.4 FTEs and Union Gas proceed with 10.0 FTEs in 2018, plus one additional FTE each for the LCIF, as discussed later in this submission.

At the oral hearing, Union Gas<sup>21</sup> and Enbridge Gas<sup>22</sup> both indicated that although they are affiliates, and there are currently no restrictions on the two utilities collaborating, they are still proposing to proceed with their respective 2018 Compliance Plans. The reasons cited for the separation include: the fact that Enbridge Gas and Union Gas remain separate entities until a Decision on the MAADs application is provided by the OEB, that the 2018 Compliance Plans were due to be filed in late-2017 during which

<sup>&</sup>lt;sup>18</sup> EB-2017-0255, Exhibit 3, Tab 5, p. 6

<sup>&</sup>lt;sup>19</sup> EB-2017-0255, Exhibit B.Staff.11, p. 3

<sup>&</sup>lt;sup>20</sup> EB-2017-0275, IRR.1(c), p. 2

<sup>&</sup>lt;sup>21</sup> Oral Hearing Transcript, Volume 1, pp. 48-52

<sup>&</sup>lt;sup>22</sup> Oral Hearing Transcript, Volume 4, pp. 19-21

time the affiliate rules prohibited them from working collaboratively; and, because they each have their own compliance obligations to meet.

The reasons noted above are not compelling. The restrictions that prohibited working collaboratively, although applicable when they filed their 2018 Compliance Plans in November 2017, were removed at the beginning of 2018 when Union Gas and Enbridge Gas became affiliates.<sup>23</sup> Enbridge Gas and Union Gas could be working together to ensure that their 2018 Compliance Plans are administered consistently and in a more cost-effective manner. OEB staff submits that a more flexible staffing plan that included an option for combining Cap and Trade teams should have been proposed. Enbridge Gas and Union Gas could have included options to leverage existing expertise from one utility or the other, or promote synergies between the current Cap and Trade resources that have been developed at the utilities since 2016. In contrast, Enbridge Gas and Union Gas are proposing to continue to increase their respective Cap and Trade teams to close to 20 full-time staff members with an associated staffing budget of \$4.1 million in 2018. OEB staff submits that this is unreasonable given the current status of Enbridge Gas and Union Gas as affiliates, and since the two utilities have shown they can be effective with a smaller staffing complement as evident within their actual 2017 staffing levels.

Further, OEB staff submits that consulting fees for both Enbridge Gas and Union Gas should be decreasing over time as the two utilities gain more understanding and develop in-house expertise related to the Cap and Trade programs. Also, there are generic issues common to both utilities than can be managed by a single consultant. Combined, Enbridge Gas and Union Gas incurred approximately \$393,000 in consulting costs in 2017. The two utilities have proposed a combined 2018 consulting budget of \$820,000 or approximately double of what was required in 2017. OEB staff acknowledges that the use of consulting is necessary at times, and can be used to increase flexibility during transitions. Although Enbridge Gas and Union Gas are currently affiliates and working through a transition with a live merger application in front of the OEB, the two utilities have proposed a consulting budget that is double that which was needed in 2017. OEB staff submits that this request is not reasonable and the OEB should approve consulting fees that are capped at the actual consulting expenses incurred in 2017.

OEB staff suggests that the OEB provide Enbridge Gas and Union Gas with clear direction that as part of the 2019-2020 Compliance Plan, the two utilities should propose

<sup>&</sup>lt;sup>23</sup> Oral Hearing Transcript, Volume 1, p. 50

staffing plans that include synergies between the existing Cap and Trade resources at both utilities. Further, Enbridge Gas and Union Gas should be required to show how their staffing plans have been coordinated and where efficiencies and flexibility has been incorporated. In an effort to ensure that ratepayers are only funding staff that are absolutely required to administer the two utilities' compliance plans, there needs to be greater efforts by Enbridge Gas and Union Gas to develop and propose the most efficient plan possible.

OEB staff submits that EPCOR's request for 0.5 FTE and a consulting budget of \$0.077 million in 2018 is reasonable.

## **Issue 1.1 - Volumetric Forecasts**

The Cap and Trade Framework indicated in Section 5.2.1 that the OEB expects the Gas Utilities to use their existing OEB-approved methodology when preparing forecasts for the purpose of the Compliance Plans. The Gas Utilities were also to exclude volume forecasts of LFEs and voluntary participants from their volume forecasts in their Compliance Plans.

## Enbridge Gas – Volumetric Forecasts

Enbridge Gas stated that its 2018 customer related and facility related volumetric forecasts are consistent with OEB approved methodologies in effect under Enbridge Gas' Custom Incentive Regulation mechanism. These forecasts were filed by Enbridge Gas in its 2018 Rate Adjustment Application.<sup>24</sup> Mandatory and voluntary cap and trade participants as well as volumes derived from biomass or consumed outside of Ontario were also removed from the forecasts.<sup>25</sup>

## **Union Gas – Volumetric Forecasts**

Union Gas stated that its 2018 customer-related and facility-related volumetric forecasts are consistent with the OEB-approved methodologies in Union Gas' 2013 Cost of Service Proceeding,<sup>26</sup> and in the 2017 Compliance Plan proceeding.<sup>27</sup> These forecasts excluded the volume forecast for customers that have been identified by the Ministry of the Environment and Climate Change as capped, mandatory or voluntary participants.

<sup>&</sup>lt;sup>24</sup> EB-2017-0086

<sup>&</sup>lt;sup>25</sup> EB-2017-0224, Exhibit B, T2, S1, Pages 1-8 and Argument-In-Chief, Pages 4-5

<sup>&</sup>lt;sup>26</sup> EB-2011-0210

<sup>&</sup>lt;sup>27</sup> EB-2017-0255, Exhibit 2, p. 3 and Argument-In-Chief, Page 7

Union Gas has also excluded the volume forecast for wholesale customers since these customers are not covered by Union Gas' compliance obligation.<sup>28</sup>

## **EPCOR – Volumetric Forecasts**

EPCOR stated that its 2018 customer-related and facility-related volumetric forecasts are consistent with those submitted as part of its 2017 Cost of Service application<sup>29</sup>, currently in abeyance, and are based on a methodology previously approved by the OEB. These forecasts excluded its LFE.<sup>30</sup>

## **OEB Staff Submission**

The Cap and Trade Framework indicated in Section 5.2.1 that the OEB expects the Gas Utilities to use their existing OEB-approved methodology when preparing forecasts for the purpose of the Compliance Plans. The Gas Utilities were also to exclude volume forecasts of LFEs and voluntary participants from their volume forecasts in their Compliance Plans.<sup>31</sup>

OEB staff submits that the Gas Utilities' volume forecasts are consistent with the OEB's Cap and Trade Framework and appropriately use volume forecast methodologies that have been accepted by the OEB.

## Issue 1.2 – GHG Emissions Forecasts

The Gas Utilities stated that they have estimated their 2018 GHG emissions in accordance with the provincial government's Ontario Regulation 143/16, *Quantification, Reporting and Verification of Greenhouse Gas Emissions* and the associated *Guidelines for Quantification, Reporting and Verification of Greenhouse Gas Emissions*.<sup>32</sup>

## **OEB Staff Submission**

OEB staff submits that the Gas Utilities have appropriately estimated their GHG emissions forecasts using the proper government-approved methodology as set out in the Cap and Trade Framework.

<sup>&</sup>lt;sup>28</sup> EB-2017-0255, Exhibit 2, p. 2 and AIC, p. 7

<sup>&</sup>lt;sup>29</sup> EB-2016-0236

<sup>&</sup>lt;sup>30</sup> EB-2017-0275, Exhibit 2, pp. 7-8

<sup>&</sup>lt;sup>31</sup> Cap and Trade Framework, pp. 17-18

<sup>&</sup>lt;sup>32</sup> EGD: Exhibit B, T3, S1, pp. 1-5; EPCOR: Exhibit 2, pp. 9-11; and Union Gas: Exhibit 2, pp. 8-11

## Issue 1.3 – Annual Carbon Price Forecast

The Gas Utilities indicated that they have estimated their 2018 annual carbon price forecast using the average 21-day strip of the Intercontinental Exchange (ICE) daily settlement price for a California Carbon Allowance (CCA). The ICE price is calculated in US dollars which is then converted into Canadian dollars (CAD).

Enbridge Gas<sup>33</sup> and Union Gas<sup>34</sup> estimated their annual carbon price forecast to be \$18.99 CAD per tonne of CO<sub>2</sub> equivalent for 2018.

EPCOR estimated its annual carbon price forecast to be \$19.00 CAD per tonne of  $CO_2$  equivalent for 2018.<sup>35</sup>

## **OEB Staff Submission**

OEB staff submits that the Gas Utilities have appropriately estimated their 2018 annual carbon price forecast as set out in the Cap and Trade Framework.

## Issue 1.6 – Performance Metrics

The Cap and Trade Framework discusses how the OEB will use performance benchmarks to assess the forecast costs of Compliance Plans. The Cap and Trade Framework indicates that the OEB will require the Gas Utilities to calculate and provide key performance metrics, including cost per tonne (\$/tonne) of each compliance instrument or activity and a comparison of costs of investing in GHG abatement activities versus procuring emissions units.<sup>36</sup>

Enbridge Gas noted that virtually no attention was paid to performance metrics during the interrogatory process and during the oral hearing phases of the proceeding. Therefore, Enbridge Gas concluded that there is general satisfaction with the continued use by Enbridge Gas of the metrics outlined in the Cap and Trade Framework.<sup>37</sup>

<sup>&</sup>lt;sup>33</sup> Exhibit B, T4, S1, pp. 1-3

<sup>&</sup>lt;sup>34</sup> Exhibit 2, pp. 11-12

<sup>&</sup>lt;sup>35</sup> Exhibit 2, pp. 11-12

<sup>&</sup>lt;sup>36</sup> Cap and Trade Framework, p. 24

<sup>&</sup>lt;sup>37</sup> EB-2017-0224, Argument-In-Chief, p. 17

Union Gas indicated that it has provided the total expected volume, forecast cost per tonne, total expected cost, and the weighted average cost per tonne of GHG emissions for its 2018 Compliance Plan as per the Cap and Trade Framework.<sup>38</sup>

EPCOR stated that it has provided the total expected volume, forecast cost per tonne, total expected cost, and the weighted average cost per tonne of GHG emissions for its 2018 Compliance Plan as per the Cap and Trade Framework.<sup>39</sup>

## **OEB Staff Submission**

OEB staff submits that the performance metrics set out in the Cap and Trade Framework should continue to be relied on.

Issue 1.8 – Longer Term Investments Issue 1.9 – New Business Activities Issue 1.10 – Customer Abatement

The Cap and Trade Framework outlined guidance on Longer Term Investments, New Business Activities and Customer Abatement related to the Gas Utilities developing new proposals to respond to the Cap and Trade program.

OEB staff will address two areas related to Longer Term Investments, New Business Activities, and Customer Abatement:

- Marginal Abatement Cost Curve (MACC) Analysis
- Abatement Construct, Initiative Funnel & Low Carbon Initiative Fund

## 1 - MACC ANALYSIS

## Background

The Cap and Trade Framework states that the Gas Utilities' Compliance Plans are expected to support the government's effort to reduce GHG emissions in Ontario.<sup>40</sup> The Cap and Trade Framework made a number of references to the role that abatement programs will likely play as part of the Gas Utilities' Compliance Plans.

<sup>&</sup>lt;sup>38</sup> EB-2017-0255, Argument-In-Chief, p. 15

<sup>&</sup>lt;sup>39</sup> EB-2017-0275, Argument-In-Chief, p. 10

<sup>&</sup>lt;sup>40</sup> Cap and Trade Framework, p. 1

- Section 5.3.1.1 noted that the OEB will assess whether the Gas Utilities effectively used the OEB MACC, their forecasts, and any other inputs to prioritize and select the compliance instruments and activities they have decided to include in their Compliance Portfolio.
- Section 5.4 indicated that, due to provisions in the *Climate Change Act* and *Cap and Trade Regulation* which provide for a declining cap and increasing cost of allowances over time, the OEB considers longer-term planning to be a prudent and reasonable activity that the Gas Utilities should consider. The OEB also noted that it expects the Gas Utilities' Compliance Plans will reflect long-term planning for GHG abatement beyond a single year or a single compliance period.

As part of their 2017 Compliance Plans, none of the Gas Utilities proposed any longerterm investments, new business activities or abatement activities. In the OEB's Decision on the 2017 plans, the OEB agreed with the Gas Utilities that it would be difficult to include abatement activities in their 2017 Compliance Plans given that the Long Term Carbon Price Forecast (LTCPF) and MACC were not yet available. The OEB encouraged the Gas Utilities to give consideration to abatement options in future Compliance Plans.<sup>41</sup>

## **Customer Abatement and MACC Analysis**

Similar to their 2017 Compliance Plans, Enbridge Gas and Union Gas did not propose any incremental customer abatement activities in 2018 based on their analyses of the MACC. EPCOR proposed new incremental customer abatement activities to be funded through its administrative budget.

## Enbridge Gas – Customer Abatement and MACC Analysis

Enbridge Gas indicated it conducted an analysis of both the MACC and Natural Gas Conservation Potential Study (CPS), concluding that no incremental cost-effective energy efficiency programming above its OEB-approved DSM Plan was possible.<sup>42</sup> Enbridge Gas indicated that even if any cost-effective potential was found, it would be overly complex and difficult to manage the overlap between DSM and incremental customer abatement programs.<sup>43</sup>

<sup>&</sup>lt;sup>41</sup> EB-2016-0296/300/330, 2017 Compliance Plan Decision and Order, Sept. 21, 2017, p. 27

<sup>42</sup> EB-2017-0224, Argument-in-Chief, p. 29

<sup>43</sup> EB-2017-0224, Exhibit C, Tab 5, Schedule 2, pp.26-27

Enbridge Gas indicated that it is currently delivering a residential conservation program incremental to its OEB-approved 2015-2020 DSM Plan, funded by the Ministry of Energy's Green Investment Fund (GIF) through a Transfer Payment Agreement (TPA). The GIF funded program resembles its OEB-approved residential DSM program, but includes non-gas fuel sources and customers outside Enbridge's franchise area, and an adaptive thermostats program.<sup>44</sup>

During the oral hearing, Enbridge indicated that it could cost-effectively expand its current OEB-approved Commercial and Industrial DSM program by \$5 million.<sup>45</sup>

## **Union Gas – Customer Abatement and MACC Analysis**

Union Gas indicated it conducted an analysis of both the MACC and CPS, using the MACC to assess incremental abatement potential volume, and used the CPS to establish cost benchmarks.<sup>46</sup> Union Gas concluded that although incremental cost-effective abatement potential was found in the residential sector, it was not prudent to pursue in 2018 and instead, Union Gas would pursue it through the existing DSM Framework.<sup>47</sup>

Similar to Enbridge Gas, Union Gas indicated that it is using GIF funds provided by the Ministry of Energy through a TPA to enhance its existing DSM home retrofit program to achieve incremental emissions reductions in 2018. The GIF funding supports expanded eligibility for participation, customer incentives for new technologies, and increased incentive levels for existing measures.<sup>48</sup>

During the oral hearing, Union Gas notionally confirmed that it could cost-effectively expand its current OEB-approved Commercial and Industrial DSM program by \$5 million by adding new measures, new customers, and higher incentives, similar to how Union Gas has expanded its OEB-approved residential DSM program with GIF funding.<sup>49</sup>

Union Gas indicated its commitment to address abatement and long-term investments in future Compliance Plans, in a manner consistent with its 2018 Compliance Plan application. It noted that it will assess abatement and long-term investments as the

<sup>&</sup>lt;sup>44</sup> EB-2017-0224, Exhibit I.1.EGDI.GEC.22 a)

<sup>&</sup>lt;sup>45</sup> Oral Hearing Transcript, Volume 4, pp. 44-45

<sup>46</sup> EB-2017-0255, Argument-in-Chief, p. 22

<sup>&</sup>lt;sup>47</sup> EB-2017-0255, Exhibit 3, Tab 4

<sup>&</sup>lt;sup>48</sup> EB-2017-0255, Exhibit B.LIEN.1, a)

<sup>&</sup>lt;sup>49</sup> Oral Hearing Transcript, Volume 2, pp. 171-172

market matures, uncertainties resolve, and mechanisms to ensure cost recovery are determined.<sup>50</sup>

## **EPCOR – Customer Abatement and MACC Analysis**

EPCOR began offering its residential customers a home retrofit program in autumn 2017. EPCOR receives marketing materials from Union Gas, which administers the program. EPCOR's program is funded through the administrative budget it included in its Cap and Trade Compliance Plan, and 20 participants have participated to date. As a result, EPCOR included a 7.1% reduction in its 2018 GHG emission forecast. EPCOR also indicated that it is looking into developing energy efficiency programs for its commercial and industrial customers, and is working with its contractor, Blackstone, to analyze and understand the MACC.<sup>51</sup>

## Intervenor Evidence – Environmental Defence and Green Energy Coalition

Environmental Defence (ED) and the Green Energy Coalition filed expert evidence prepared by Mr. Chris Neme. The expert evidence addressed the adequacy of Enbridge Gas' and Union Gas' assessment of incremental efficiency as a compliance obligation, the reasonableness of their conclusions that there is no cost-effective abatement, and the associated cost and risk implications. Mr. Neme found that the two utilities' analyses of incremental efficiency are extremely limited, contains errors and misleading omissions, and therefore cannot be relied upon. He also concluded that not pursuing incremental energy efficiency increased risks and costs to ratepayers.<sup>52</sup>

## **Other Comments from Intervenors**

ED submitted a letter requesting that the OEB invite Enbridge and Union Gas to file plans for incremental conservation measures driven by potential carbon cost savings as part of the OEB's mid-term review of the 2015-2020 DSM Framework, for implementation in 2019. As an alternative, if the OEB did not direct the two utilities to file plans as part of the DSM Mid-Term Review, ED requested that the OEB panel hearing the 2018 Compliance Plan applications issue a preliminary ruling on issues associated with incremental abatement.

<sup>&</sup>lt;sup>50</sup> EB-2017-0255, Union Gas Argument In-Chief, p. 26

<sup>&</sup>lt;sup>51</sup> Oral Hearing Transcript, Volume 4, p. 113

<sup>&</sup>lt;sup>52</sup> GEC ED Evidence, Testimony Summary, pp. 6-8

BOMA, VECC, SEC, and GEC filed letters supporting ED's requests. Enbridge Gas, Union Gas, APPrO, and IGUA filed letters that discussed concerns with expanding the scope of the DSM mid-term review at this time. The OEB issued a letter on May 30, 2018, indicating that elements of the ED's letter would be discussed as part of the upcoming stakeholder meeting on the DSM Mid-Term Review.

## **OEB Staff Submission**

The Cap and Trade Framework indicated the OEB would assess whether the Gas Utilities considered a diversity of compliance options and their costs, and developed Compliance Plans that are as cost-effective as possible.<sup>53</sup> Additionally, the Cap and Trade Framework states that the utilities' Compliance Plans are expected to support the government's effort to reduce GHG emissions in Ontario.<sup>54</sup>

## Summary - Enbridge Gas and Union Gas

OEB staff submits that by not proposing any incremental cost effective customer abatement in their respective 2018 Compliance Plans, Enbridge Gas and Union Gas have not followed the Cap and Trade Framework. Customer abatement activities were not included, even though the MACC demonstrates that many customer abatement activities in the commercial and industrial sector are less expensive than purchasing allowances or undertaking RNG. In OEB staff's view, Enbridge Gas and Union Gas missed an opportunity to include incremental customer abatement by building on the cost-effective DSM programs they already have in market.

OEB staff recommends that the OEB approve a total 2018 Compliance Plan budget that is \$700,000 less for each of Enbridge Gas and Union Gas, as calculated below by OEB staff. This amount is a conservative estimate of the extra costs ratepayers will incur in 2018 because Enbridge Gas and Union Gas chose not to include any incremental abatement activities in their 2018 Compliance Plans.

OEB staff's submission on customer abatement and the MACC analysis is divided into five parts:

- Use of the MACC
- GHG Abatement Potential
- Delivering Abatement through the Cap and Trade Framework

<sup>&</sup>lt;sup>53</sup> Cap and Trade Framework, p. 23

<sup>&</sup>lt;sup>54</sup> Cap and Trade Framework, p. 1

- Reduced Risk to Ratepayers
- Recommendation

## Use of the MACC

OEB staff submits that Enbridge Gas and Union Gas did not use the MACC as directed in the Cap and Trade Framework. The MACC was intended to be used for cost benchmarking.<sup>55</sup> The utilities used it to assess potential abatement volumes rather than as a cost benchmarking tool, and their analyses cannot be relied upon. As a result of misusing the MACC, the two utilities did not identify any abatement opportunities that would have been cost-effective, while also including incorrect data and arbitrary assumptions.

The MACC depicts a range of compliance options along a spectrum of costs. The primary purpose of the MACC is to compare the cost effectiveness of various abatement measures amongst themselves and in relation to the cost of purchasing an allowance. This was explained in the OEB's letter of July 20, 2017<sup>56</sup> that accompanied the MACC:

The MACC provides a basis for comparison of the relative cost-effectiveness of a range of GHG abatement activities. The OEB adopts the MACC for its stated purpose.

The MACC was not intended to inform the Gas Utilities about the maximum available potential volume of abatement. The MACC report indicates that its results do not represent the maximum possible abatement that could be achieved through customer abatement, nor the maximum possible costs.<sup>57</sup>

The Cap and Trade Framework provided guidance on how the MACC is to be used. Specifically, it indicated that the MACC will establish benchmarks for the cost per tonne of a compliance instrument or activity.<sup>58</sup> The Cap and Trade Framework further elaborates that the OEB will benchmark a utility's Compliance Plan costs against the OEB MACC. The MACC provides the most comprehensive tool for assessment of cost-

<sup>&</sup>lt;sup>55</sup> Cap and Trade Framework, p. 24

<sup>&</sup>lt;sup>56</sup> OEB letter dated July 20, 2017, Exhibit KT1.3

<sup>&</sup>lt;sup>57</sup> MACC Report, Exhibit KT1.2, p. 6

<sup>&</sup>lt;sup>58</sup> Cap and Trade Framework, p. 24

effectiveness because it identifies the effective cost of the full range of compliance options.<sup>59</sup>

The Cap and Trade Framework does not it indicate that the MACC should be used to determine maximum abatement potential volume, as was done by both Union Gas and Enbridge Gas. Therefore, OEB staff submits that Enbridge Gas and Union Gas incorrectly applied the MACC. This incorrect application of the MACC has resulted in incorrect conclusions by both utilities.

Neither utility provided any analysis comparing the average cost benchmarks in the MACC to the utility's compliance plan costs, as the Framework clearly contemplated. Rather than using the MACC, Union Gas created its own cost comparison (or benchmark) from the achievable potential scenarios in the CPS<sup>60</sup>. OEB staff submits that this was not appropriate. The CPS established the maximum potential abatement available to the Gas Utilities. The CPS did not provide cost benchmarks for individual measures and end-uses for use in a Cap and Trade Compliance Plan. Additionally, Union Gas' cost benchmarks created from the CPS excluded the benefit of avoided gas and carbon (allowance) costs. OEB staff submits that Union Gas' conclusion that there is no cost-effective incremental abatement over-and-above its DSM plan is incorrect. This conclusion was refuted by Union Gas itself, which, similar to Enbridge Gas, was able to confirm through cross examination that there was cost-effective incremental commercial and industrial energy efficiency potential that could be captured if additional funding was available.<sup>61</sup>

OEB staff notes that in addition to the inappropriateness of using the MACC to estimate GHG abatement volume potential, the two utilities' analysis of this volume is flawed. Mr. Neme's evidence highlights a number of errors and omissions made by the two utilities<sup>62</sup>. These include incorporating DSM savings achieved by customers with their own compliance obligations (e.g., LFEs and voluntary participants, which were excluded from the MACC<sup>63</sup>), and reducing the MACC savings estimate down by assumed net-to-gross factors when the MACC savings estimates already removed naturally-occurring energy efficiency changes, including would-be free riders.<sup>64</sup>

<sup>&</sup>lt;sup>59</sup> Ibid., p. 25.

<sup>&</sup>lt;sup>60</sup> EB-2017-0255, Argument-in-Chief, p. 22

<sup>&</sup>lt;sup>61</sup> Oral Hearing Transcript, Volume 2, pp. 171-172

<sup>&</sup>lt;sup>62</sup> GEC ED Evidence, Testimony Summary, pp. 14-22

<sup>&</sup>lt;sup>63</sup> MACC Report, Exhibit KT1.2, p. 7

<sup>&</sup>lt;sup>64</sup> CPS Report, Exhibit KT1.5, p. 8

Union Gas indicated that it applied net-to-gross factors to take into account initiatives related to the Climate Change Action Plan (CCAP).<sup>65</sup> OEB staff agrees that the CPS and the MACC did not account for new initiatives related to CCAP.<sup>66</sup> However, to the extent that the utilities seek to apply a deduction based upon the impacts of CCAP, they have the burden of providing a rational basis for the deduction. They have not done so.

OEB staff agrees with Mr. Neme who indicated that the net-to-gross ratios applied to the commercial and industrial sectors, some of which were taken from a 2008 net-to-gross study of the free riders in the two utilities' custom programs,<sup>67</sup> are in no way an appropriate adjustment to account for CCAP initiatives. While OEB staff agrees that there may be some, likely minor<sup>68</sup>, impacts of the CCAP initiatives on the commercial and industrial abatement volume potential to the Gas Utilities, no credible analysis exists on the public record. By applying these adjustment factors, the two utilities' analyses show an arbitrarily reduced amount of cost-effective abatement potential in the industrial and commercial sectors.

OEB staff submits that the OEB cannot rely on any of Enbridge Gas' nor Union Gas' analysis or GHG abatement volume potential as it has been done. OEB staff submits that the two utilities' analysis of MACC and CPS data did not align with the Cap and Trade Framework and cannot be relied upon.

## **GHG Abatement Potential**

OEB staff submits that there is significant, cost-effective potential for incremental abatement activities in the commercial and industrial sectors.

OEB staff acknowledges that the provincial government is investing heavily in residential conservation programs, with at least two programs already launched.<sup>69</sup> Additionally, both Enbridge Gas and Union Gas are delivering incremental residential abatement programs through the GIF. As a result, given the high potential for overlap with these other programs, OEB staff understands and accepts Enbridge Gas' and Union Gas' decision to not invest in additional incremental residential energy efficiency programs through their Cap and Trade Compliance Plans at this time.

<sup>65</sup> Oral Hearing Transcript, Volume 2, pp. 133

<sup>&</sup>lt;sup>66</sup> CPS Report, Exhibit KT1.5, p. 9

<sup>&</sup>lt;sup>67</sup> Oral Hearing Transcript, Volume 2, p. 175 and Volume 4, p. 36

<sup>&</sup>lt;sup>68</sup> Oral Hearing Transcript, Volume 4, pp. 93-94

<sup>&</sup>lt;sup>69</sup> Undertaking JT1.8, p. 2

However, as noted above, witnesses from Enbridge Gas and Union Gas conceded that the utilities could cost-effectively spend \$5 million more on their commercial and industrial DSM programs. This amount represents an increase of approximately 30%<sup>70</sup> over each utility's annual commercial and industrial DSM budget. Neither utility indicated that a \$5 million annual increase to the commercial and industrial DSM program was the upper limit of incremental cost-effective potential available.

Additionally, as Mr. Neme explained during cross-examination, that he reviewed the government's CCAP conservation initiatives for the industrial sector and found them to be limited to only two of the many<sup>71</sup> industrial sub-sectors in Ontario.<sup>72</sup> Therefore, OEB staff submits that there was nothing limiting the ability of Enbridge Gas and Union Gas to achieve cost-effective incremental abatement in the commercial and industrial sector in 2018.

OEB staff calculated how much cost-effective abatement potential Enbridge Gas and Union Gas could have implemented:

- OEB staff assumed that Enbridge Gas and Union Gas could deliver incremental abatement in the commercial and industrial sector at a program cost of <u>\$20/tCO<sub>2</sub>e</u>, based on data from their 2018-2020 DSM programs:
  - Enbridge Gas and Union Gas avoid 10,184,063 tCO<sub>2</sub>e<sup>73</sup>
  - Programs cost of \$178.6 million<sup>74</sup>
  - Therefore the program cost is approximately \$17.50/tCO<sub>2</sub>e; to be conservative, OEB staff assumed that incremental abatement programs would be slightly more expensive, at \$20/tCO<sub>2</sub>e.
- OEB staff then calculated that \$5 million could provide <u>250,000 tCO<sub>2</sub>e (\$5 million</u> <u>/ \$20 per tCO<sub>2</sub>e)</u> of GHG abatement in the C&I sector.

Given that both Enbridge Gas and Union Gas are aware of incremental abatement potential within the C&I sectors, OEB staff submits that they should have conducted an

<sup>&</sup>lt;sup>70</sup> EB-2015-0029 / EB-2015-0029, 2015-2020 DSM Decision, Schedule A. Staff estimated Enbridge Gas' 2018 C&I budget to be \$14.4 million based on the C&I programs in its Resource Acquisition (\$2,232,905 prescriptive program + \$4,758,344 direct install + \$7,361,562 custom program), and Union Gas' 2018 C&I Resource Acquisition to be \$17,794,000.

<sup>&</sup>lt;sup>71</sup> 2016 Natural Gas Potential Study identified 13 industrial sub-sectors. CPS Report, Exhibit KT1.5, pp. 108-109

<sup>72</sup> Oral Hearing Transcript, Volume 4, p. 94

<sup>&</sup>lt;sup>73</sup> Exhibit GEC/ED.STAFF.3, p. 2. Avoided carbon costs: 4,761,563 tCO<sub>2</sub>e (Enbridge Gas) + 5,422,500 tCO<sub>2</sub>e (Union Gas)

<sup>&</sup>lt;sup>74</sup> Ibid., Budget: \$85.9 million (Enbridge Gas) + \$92.7 million (Union Gas)

analysis of the cost benchmarks for C&I measures in the MACC to help them pace and prioritize abatement programs for those sectors.

The MACC cost benchmarks quantify the benefit of avoiding gas and allowance costs by installing energy efficiency and conservation measures. These costs reflect these benefits over the lifetime that the technologies or measures remain installed, net of program costs incurred.<sup>75</sup> Measures that are less expensive than an allowance over their lifetime have a negative cost benchmark.

OEB staff notes that commercial and industrial measures are highly cost-effective compared to purchasing allowances, providing an average benefit (i.e., negative cost) of \$83 to \$139 per ton abated, as shown in the MACC.

Customer Abatement End Use of RNG Category	Average \$/tCO₂e	Average ¢/m³	Estimated 2018- 2020 Abatement (tCO <sub>2</sub> e)	Estimated 2018- 2020 Abatement (million m <sup>3</sup> )	Estimated Cost Effective Abatement (%)
Industrial HVAC	-139	-26	51,400	27	100%
Industrial Direct Heating	-132	-25	69,700	37	100%
Industrial Steam Hot Water System	-131	-25	58,600	31	100%
Industrial Gas Turbine	-130	-24	550	0.3	100%
Industrial Steam Turbine	-130	-24	250	0.1	100%
Residential Clothes Dryers	-123	-23	3,830	2	98%
Commercial Food Service	-119	-22	1,040	0.6	100%
Residential Systems	-97	-18	1,850	1	100%
Residential Fireplaces	-94	-18	16,200	8.7	100%
Commercial Systems	-88	-16	70,100	37	86%
Commercial Service Water Heating	-83	-16	13,400	7	96%
Commercial Space Heating	-83	-15	117,000	63	96%
Residential Space Heating	7	-1	230,000	122	65%
Residential Swimming Pool Heaters	24	5	5,480	3	74%
Residential Domestic Hot Water	108	20	12,900	7	57%
RNG Landfill Gas	133	25	114,000	61	0%
Commercial Other	151	28	3	0.002	0%
RNG Ag Manure	527	99	11,200	6	0%
RNG Wastewater Treatment Plants	1,867	350	800	0.4	0%
values may not sum to total due to re	ounding		778,000	415	

#### Table 4: MACC Benchmarks Based on Mid-Range LTCPF<sup>76</sup>

<sup>&</sup>lt;sup>75</sup> MACC Report, Exhibit KT1.2, p. 7

<sup>&</sup>lt;sup>76</sup> MACC Report, Exhibit KT1.2, MACC based on the mid-range LTCPF, pp.14-15. Note that this range excludes one category called Commercial Other that includes only one measure, solar pre-heaters for pools. The MACC did not show it to be cost-effective.

Based on these cost benchmarks, OEB staff calculated the value of abating 250,000 tCO<sub>2</sub>e:

- OEB staff assumed a benefit would be at the bottom end of the range, or <u>\$83/tCO<sub>2</sub>e</u>, to be conservative.
- Therefore, 250,000 tCO<sub>2</sub> abatement in the C&I sector represents a cost savings of at least <u>\$21 million (250,000t x \$83/tCO<sub>2</sub>e)</u> over the lifetime an efficiency measure remains installed
  - This value is net of the initial \$5 million investment.

Assuming that C&I technologies have an average life of 15 years,<sup>77</sup> ratepayers are paying at least <u>\$1.4 million (\$21 million / 15 years) more per utility, per year</u> over the lifetime that C&I measures remain in place because Enbridge Gas and Union Gas chose to purchase allowances instead of undertaking this cost-effective incremental abatement in 2018.

## Delivering Abatement through the Cap and Trade Framework

OEB staff submits that Enbridge Gas and Union Gas can and should deliver incremental abatement in their Cap and Trade Compliance Plans, in the same way they agreed to enhance their residential DSM programs using GIF funds from the Ministry of Energy.

Union Gas indicated that they believe that any incremental cost-effective abatement opportunity identified should be pursued through the DSM Framework, and that pursuing it through its Cap and Trade Compliance Plan would result in duplication.<sup>78</sup> However, Union Gas agreed with OEB staff in the oral hearing that there was nothing precluding it from pursuing incremental abatement through the Cap and Trade Framework.<sup>79</sup>

Enbridge Gas and Union Gas have fixed DSM budgets for 2015-2020, as established in the OEB's 2015-2020 DSM Decision.<sup>80</sup> OEB staff submits that the evidence shows that using Cap and Trade funding to augment current DSM programs is not only possible, but is an efficient and effective way to achieve incremental GHG abatement in the current Cap and Trade Compliance Period. OEB staff notes that both Enbridge Gas and

<sup>&</sup>lt;sup>77</sup> Average measure life from Exhibit GEC/ED.STAFF.3

<sup>&</sup>lt;sup>78</sup> EB-2017-0255, Argument-in-Chief, p. 25

<sup>&</sup>lt;sup>79</sup> Oral Hearing Transcript, Volume 2, pp. 172-174

<sup>&</sup>lt;sup>80</sup> EB-2015-0029/0049, 2015-2020 DSM Decision, Schedule A

Union Gas are using GIF funding to achieve incremental GHG abatement by building on their residential DSM programs, and that a similar arrangement could be made to add new incentives and new participants to their Commercial and Industrial DSM programs.

OEB staff notes that the guidelines to the DSM Framework provide guidance on how to attribute costs and benefits to different funding sources.<sup>81</sup> Additionally, agreements that each gas utility established with the Ministry of Energy includes attribution policy to ensure that incremental gas savings are attributed to GIF and not to DSM.<sup>82</sup> OEB staff submits that, given this experience, Enbridge Gas and Union Gas could establish a similar attribution structure for incremental C&I abatement.

## **Reduced Risk to Ratepayers**

OEB staff submits that including incremental abatement as part of the Compliance Plan does not increase a gas utility's risk of non-compliance with their Cap and Trade compliance obligation. To the contrary, cost effective abatement protects customers from the risk of increasing compliance costs in the future.

The two utilities already include forecast abatement volumes for their DSM and GIF programming in their Cap and Trade Compliance Plans. OEB staff submits they could do the same for incremental abatement activities they pursue as part of their Compliance Plans.

The two utilities are responsible for monitoring their actual CO<sub>2</sub> emissions and adjusting their purchasing strategy accordingly. Differences between their actual and forecast emissions could relate to weather, to a Cap and Trade conservation program (DSM, GIF, or Cap and Trade-funded) missing or exceeding its emission reduction target, or to a number of other factors, including the state of the economy. As noted in the Cap and Trade Framework, the Gas Utilities are expected to employ cap and trade strategies that can adapt to changing market conditions and utility-specific characteristics.<sup>83</sup> Enbridge Gas confirmed through cross-examination that it could adjust its procurement strategy if an incremental abatement activity was on track to miss or exceed its target.<sup>84</sup>

Enbridge Gas and Union Gas noted in the oral hearing that if an abatement program does not meet its abatement targets, they would need to purchase compliance

<sup>&</sup>lt;sup>81</sup> EB-2014-0134, Filing Guidelines to the 2015-2020 DSM Framework, pp. 21-22

<sup>&</sup>lt;sup>82</sup> Union Gas: Undertaking JT1.35; Enbridge Gas: Exhibit I.1.EGDI.GEC.22 a)

<sup>&</sup>lt;sup>83</sup> Cap and Trade Framework, p. 8

<sup>&</sup>lt;sup>84</sup> Oral Hearing Transcript, Volume 3, p. 179

instruments, resulting in additional costs to ratepayers.<sup>85</sup> OEB staff acknowledge that based on a variety of factors, an abatement program may prove to be more or less costeffective than the average cost benchmark values shown in the MACC. This is less of a risk if Enbridge and Union Gas establish incremental abatement programs based on their existing DSM programs, which they have been designing and operating for more than 20 years. OEB staff submits that the two utilities, relying on their experience delivering DSM programs and regularly achieving annual natural gas savings targets, can and should monitor their abatement programs in the same way they monitor the natural gas savings results and funds for their DSM programs. Similar to DSM, OEB staff expects the Enbridge Gas' and Union Gas' abatement programs included in future Cap and Trade Compliance Plans to evolve as they gain more experience with the Cap and Trade program and market.<sup>86</sup>

Finally, OEB staff submits that if the Enbridge Gas and Union Gas undertook incremental abatement activities through their Compliance Plans, ratepayers would be shielded from the known risk of allowance prices increasing in the future. The OEB's LTCPF shows that allowance prices will increase from \$18 in 2019 to approximately \$57/t in 2028,<sup>87</sup> an approximately a three-fold increase in 10 years.

By not undertaking any incremental abatement activities now, the two utilities are exposing ratepayers to a larger portion of these increasing allowance costs. This would apply both to customers that participate in abatement programs, and those who do not, since all customers (except those with their own compliance obligations) pay for the allowances purchased by the two utilities to meet their compliance obligations. OEB staff submits that ratepayers should not bear the burden of the risk of these increasing compliance costs since there are cost-effective abatement opportunities currently available to both Enbridge Gas and Union Gas.

## Recommendation

In conclusion, the decisions by Enbridge Gas and Union Gas to not include customer abatement are not an acceptable, cost-effective, or prudent approach.

<sup>&</sup>lt;sup>85</sup> Union Gas: Oral Hearing Transcript, Volume 2, 2, pp.20-22; Enbridge Gas: Oral Hearing Transcript, Volume 3, pp. 179-180

<sup>&</sup>lt;sup>86</sup> Cap and Trade Framework, p. 2

<sup>&</sup>lt;sup>87</sup> LTCPF Report, Exhibit KT1.6, pp. 3-4. Based on the mid-range LTCPF, which assumed Ontario links with the joint WCI market, and reflects carbon markets under current outlook for complementary policies, economic growth, and existing market rules.

OEB staff proposes a disallowance of \$700,000 (\$1.4 million x 50%) for each utility. This represents a very conservative disallowance to compensate ratepayers for lost savings in 2018, as calculated above.

OEB staff submits that the OEB should direct the Enbridge Gas and Union Gas to properly consider incremental abatement as part of the 2019-2020 Compliance Plan. The Gas Utilities should be directed to provide an analysis of incremental abatement using the cost benchmarks established in the MACC, showing:

- Areas of the current DSM programs that can be enhanced and expanded
- Areas of the market and efficiency measures and technologies have the largest potential

This analysis should rely on various sources, including the current CPS and future studies.

## EPCOR

OEB staff supports the abatement program that EPCOR has included in its Cap and Trade Compliance Plan. OEB staff expects EPCOR to provide details on the program costs incurred and GHG abatement achievements to date in its 2019-2020 Compliance Plan. OEB staff also encourages EPCOR to continue its review of the MACC for additional cost-effective abatement opportunities.

## 2 – Abatement Construct, Initiative Funnel & Low Carbon Initiative Fund Background – Enbridge Gas and Union Gas

Union Gas and Enbridge Gas have worked collaboratively to develop an Abatement Construct, which will be used as a guide for each utility to evaluate and incorporate abatement activities into its Compliance Plans. The Abatement Construct includes an Initiative Funnel to investigate, plan, and implement abatement activities, abatement screening criteria to select the projects to be investigated in the Initiative Funnel, and a LCIF.

In order to fund the projects in their Initiative Funnels, Enbridge Gas and Union Gas are requesting approval of a LCIF of up to \$2 million per year for each utility, to be funded by ratepayers.

Enbridge Gas indicates that the LCIF will allow them to undertake activities such as pilots, demonstration projects, research such as jurisdictional reviews and measurement, analysis and results validation.<sup>88</sup> Union Gas indicates that the LCIF will be used for activities such as consulting, pilot programs, testing, demonstration projects, and measurement and verification.<sup>89</sup> The specific activities proposed by Enbridge Gas and Union Gas in their Initiative Funnels differ based on different initiatives, and reflect the stage of development of each initiative. For example, activities proposed for newer technologies include more research, while activities proposed for more commercially advanced technologies include pilots and field-testing.

Union Gas and Enbridge Gas developed abatement screening criteria (called "Abatement Guiding Principles" in Union Gas's application) to select and screen abatement projects for the Initiative Funnel. The criteria included:<sup>90</sup>

- **Funding** abatement programs should be able to draw on a variety of funding sources
- **Timely Advancement of Technology** recognize the role of the Gas Utilities in advancing technology through commercialization and adoption
- **Support Government Targets** abatement programs should contribute toward the achievement of GHG emissions reductions
- Efficient and Rational Development abatement programs should leverage existing infrastructure and the consideration of efficiencies when evaluating potential new initiatives against existing programs
- Respect Applicable Regulatory Constructs abatement programs should manage customer cost impacts, adhere to cost causality (no undue crosssubsidization)

The utilities indicate that projects to be funded by the LCIF would be reviewed against these criteria as well other factors such as technical feasibility, market acceptance, cost effectiveness, local content, customer segments, financial viability, design capability, and technology-specific opportunities.<sup>91</sup>

<sup>&</sup>lt;sup>88</sup> EB-2017-0224 Argument-in-Chief, pp. 10-11

<sup>&</sup>lt;sup>89</sup> EB-2017-0255, Exhibit 3, Tab 4, p. 14

<sup>&</sup>lt;sup>90</sup> Summarized from Enbridge Gas: Exhibit C, Tab 5, Sch 1, pp. 4-5; Union Gas: Exhibit 3, Tab 4, pp. 6-8

<sup>&</sup>lt;sup>91</sup> Union Gas: Oral Hearing Transcript, Volume 1, pp. 34-35; Exhibit B.Staff 21; Enbridge Gas: Exhibit C, Tab 5, Schedule 1, p. 6

Enbridge Gas requested two new staffing resources related to LCIF activities.<sup>92</sup> Union Gas included three new staffing resources related to Technology and Innovation, all of which are related to LCIF activities.<sup>93</sup>

## OEB Staff Submission Summary - Enbridge Gas and Union Gas

OEB staff is supportive of the Gas Utilities taking a proactive approach to innovation. OEB staff encourages integration of innovative approaches in utility investment planning and operations, and is of the view that ratepayer funding can be appropriate for certain types of research & development (R&D) activities.

However, OEB staff does not support the requested \$2 million 2018 LCIF budget proposed by both Enbridge Gas and Union Gas. OEB staff submits that the two utilities have not provided the level of detailed analysis and evidence to give the OEB confidence that the funding will be used effectively at this time. Further, Union Gas confirmed during the oral hearing that the projects currently identified for LCIF funding amount to \$1.16 million.<sup>94</sup> OEB staff recommends that the OEB approve a smaller cost envelope for 2018 of up to \$750,000 for each of Enbridge Gas and Union Gas instead of the request of up to \$2M per utility, and only one associated staff resource per utility. Furthermore, OEB staff recommends that the OEB direct the two utilities to provide a comprehensive work plan for LCIF funding in future Compliance Plans and add OEB staff's recommended abatement screening criteria, outlined below, to their Abatement Construct.

OEB staff will address several components of the LCIF and Initiative Funnel, including:

- Types of initiatives to be funded by the LCIF
- Collaboration
- Funding for Natural Gas Vehicles
- Abatement Screening Criteria for LCIF
- Need for comprehensive work plan
- Prudence Review
- Other Issues
- Recommendation

<sup>92</sup> EB-2017-0224, Exhibit C, Tab 5, Schedule 1, p. 11

<sup>&</sup>lt;sup>93</sup> Oral Hearing Transcript, Volume 2, p. 163

<sup>&</sup>lt;sup>94</sup> Oral Hearing Transcript, Volume 1, p. 30

## Types of initiatives to be funded by the LCIF

Enbridge Gas and Union Gas Initiative Funnels both include some activities for new technologies that are in a pre-testing, purely research phase.<sup>95</sup> OEB staff is of the view that for activities that are early in the R&D phase, such as RNG gasification and biomass conversion, government funding and non-utility research is more appropriate than ratepayer-funded research. OEB staff suggests that ratepayer-funded innovation is more appropriate for technologies that are past the research stage and that are ready to be piloted or field-tested, where benefits are more certain to accrue to customers, and where utilities are in a unique position to field test new technologies.

OEB staff is also of the view that LCIF funding should not be used to fund technologies that could be deployed in DSM rather than cap and trade, since DSM already includes budgets to research those technologies.<sup>96</sup>

## Collaboration

Enbridge Gas and Union Gas stated that they worked collaboratively to develop the Abatement Construct, that there is no duplication between the LCIF requests made by the two utilities, and that as separate utilities, they need to undertake separate projects even if those projects appear to be similar.<sup>97</sup> OEB staff submits that there are significant opportunities for collaboration with respect to Initiative Funnel activities. Union Gas and Enbridge Gas, as affiliates, should take full advantage of opportunities for collaboration on LCIF-funded initiative to benefit all natural gas customers in the province.

## **Funding for Natural Gas Vehicles**

Enbridge Gas is seeking LCIF funding for an expanded natural gas vehicle program.<sup>98</sup> As stated by Enbridge Gas, the purpose of the LCIF is to support carbon abatement for ratepayers.<sup>99</sup> Although natural gas vehicles may result in lower provincial GHG emissions over the long run, they will cause increases in GHG emissions attributable to the Gas Utilities.<sup>100</sup> In addition, natural gas vehicles are already commercially

<sup>&</sup>lt;sup>95</sup> See, for example, Biomass Conversion to RNG in UNION.Staff.21b) and RNG Gasification in EGDI.Staff.23b)

<sup>&</sup>lt;sup>96</sup> EB-2015-0029/0049, 2015-2020 DSM Decision, Schedule A, Enbridge Gas: Collaboration and Innovation fund; Union Gas: Research budget

 <sup>&</sup>lt;sup>97</sup> Union Gas: Oral Hearing Transcript, Volume 1, p. 76; Enbridge Gas: Argument-in-Chief, p, 11
<sup>98</sup> EB-2017-0224, EGDI.Staff.23b)

<sup>&</sup>lt;sup>99</sup> EB-2017-0224, Argument-in-Chief, p. 10, #24

<sup>&</sup>lt;sup>100</sup> Trade Oral Hearing Transcript, Volume 4, p. 14-16

available.<sup>101</sup> As a result of the above, OEB staff submits that it is not appropriate for ratepayers to fund natural gas vehicles as part of a ratepayer funded LCIF.

## **Abatement Screening Criteria for LCIF**

OEB staff is concerned that the two utilities' proposed abatement screening criteria are not sufficient for a thorough evaluation of which projects should be considered for the LCIF-funded Initiative Funnel. OEB staff submits that the selection criteria must be enhanced to include, at a minimum:

- **Cost effectiveness** abatement initiatives should be optimized for costs and benefits to ratepayers
- Benefit to ratepayers via GHG abatement abatement initiatives should be reasonably likely to achieve GHG savings that will directly benefit ratepayers by decreasing customer and/or facility related GHG emissions
- **Commercial viability** abatement initiatives that are reasonably likely to achieve commercial viability in the medium to long term (2-10 years) should be prioritized
- **Truly innovative** abatement initiatives should be truly innovative, and should not be activities or projects already being undertaken by any other entities in Ontario or other jurisdictions

OEB staff recommends that the OEB direct the utilities to use this enhanced screening criteria to put in place a rigorous and formal vetting system for selecting which initiatives go into the Initiative Funnel and which initiatives move through the Funnel stages. This will ensure that ratepayer funding is used on initiatives that are more likely to provide benefits to natural gas customers and that help ensure that utilities' Compliance Plans are diverse and cost-effective.

## Need for Comprehensive Work Plan

As acknowledged by Union Gas and Enbridge Gas, timelines for development of the Abatement Construct were restrictive<sup>102</sup> and no work plans were provided in pre-filed evidence. During the hearing, Union Gas and Enbridge Gas provided Undertakings

<sup>&</sup>lt;sup>101</sup> Oral Hearing Transcript, Volume 3, pp. 71-72 and Volume 4, pp. 14-16

<sup>&</sup>lt;sup>102</sup> Oral Hearing Transcript, Volume 1, p. 27, Line 20-22

outlining their work plans.<sup>103</sup> Both utilities acknowledged that these were developed in a short time period and that detailed work plans and cost estimates are not available.<sup>104</sup>

Enbridge Gas and Union Gas did provide a high level breakdown of project budgets. However, OEB staff submits that any activities receiving ratepayer funding should be accompanied by a well-planned, comprehensive work plan. OEB staff's view is that a comprehensive work plan should include, at a minimum, detailed planning of activities, staff allocation to various activities, descriptions of expected costs with quantifiable forecasts of costs and rationale for those costs, timelines for activities and implementation, and potential benefits to ratepayers in the form of expected GHG abatement.

## **Prudence Review**

Both Enbridge Gas and Union Gas state that only actual expenditures on LCIF initiatives will be recorded in the GGEIDA and that these amounts will then be subject to a prudence review by the OEB for reasonableness at a future Compliance Plan proceeding.<sup>105</sup> OEB staff understands this to mean that all amounts, including those up to the final OEB-approved total spending limit, would be subject to a final prudence review. If OEB staff's understanding is correct, OEB staff supports the Gas Utilities' proposed prudence review approach as the OEB and all interested parties will have an opportunity to examine all LCIF spending prior to the utilities' receiving approval for funding recovery.

## **Other Issues**

OEB staff is aware that there are potential issues around non-regulated affiliates benefitting from ratepayer funded R&D.<sup>106</sup> Given this risk, OEB staff submits that the OEB should provision that any amounts funded through the LCIF should be refundable to ratepayers if any of the R&D results were used by a non-regulated affiliate. This would ensure a level playing field and ensure that costs follow benefits.

<sup>&</sup>lt;sup>103</sup> Union Gas: Undertaking JT1.17; Enbridge Gas: Undertaking J4.1

<sup>&</sup>lt;sup>104</sup> Union Gas: Oral Hearing Transcript, Volume 1, pp. 115-117, 176-177, Enbridge Gas: Oral Hearing Transcript, Volume 4, pp. 5-6, 8

<sup>&</sup>lt;sup>105</sup> Enbridge Gas: Argument-in-Chief, p. 12, #28; Union Gas: Argument-in-Chief, p. 19, #47

<sup>&</sup>lt;sup>106</sup> Oral Hearing Transcript, Volume 4, p. 16

OEB staff is also of the view that the utilities should make the results of the ratepayer funded R&D public by posting it on their website and filing it with the next Compliance Plan following completion of the research.

## Recommendation

To summarize, although OEB staff supports the proactive approach to innovation proposed by Enbridge Gas and Union Gas, OEB staff submits that Enbridge Gas and Union Gas have not provided a comprehensive and well developed work plan to support their requested LCIF funding. OEB staff recommends that the OEB direct the two utilities to provide a more comprehensive and well developed work plan that includes adding OEB staff's recommended abatement screening criteria to their Abatement Construct and file this evidence as part of the 2019-2020 Compliance Plan application. Further, OEB staff submits that it is critical that Enbridge Gas and Union Gas increase collaboration between the two utilities to ensure the most robust proposals are developed. Finally, OEB staff submits that it is not appropriate for ratepayers to fund Enbridge Gas' natural gas vehicle initiative.

In an effort to encourage and promote continued utility-led innovation, OEB staff recommends the OEB find it reasonable that the two utilities proceed with a more modest LCIF budget of up to \$750,000 for each of Enbridge Gas and Union Gas in 2018 instead of the request of up to \$2M per utility. OEB staff submits that this lower cost envelope is appropriate given that one of the utilities had only identified \$1.16 million of projects to fund through LCIF to date. Therefore a slower ramp up for this fund is appropriate. OEB staff submits that with a reduced budget, it is not appropriate that the requested staffing levels be approved. OEB staff submits that the OEB should find it appropriate that only one staff resource (one FTE) be approved for each utility in 2018, related to the LCIF. OEB staff submits that any spending on the LCIF must be reviewed at the time of disposition of the GGEIDA.

## **Issue 2 - Monitoring and Reporting**

As per the Cap and Trade Framework, the OEB requires annual monitoring and reporting by the Gas Utilities on the results of their cap and trade activities and any changes to their Compliance Plans.

The Gas Utilities filed their actual activity reports and auction transaction summary reports that outlined their cap and trade activities for 2017 and partial results for 2018 with the OEB.

## **OEB Staff Submission**

At the oral hearing, OEB staff asked Enbridge Gas and Union Gas to consider including a further line item under abatement to capture RNG in their actual activity reports. Enbridge Gas<sup>107</sup> and Union Gas<sup>108</sup> agreed to add this new line to their templates. OEB staff submits that the OEB should approve this addition.

OEB staff also submits that the monitoring reports filed by the Gas Utilities are similar and allow the OEB to review and compare the results of their Compliance Plans as set out in the Cap and Trade Framework.

## Issue 3 – Customer Outreach

As part of the 2018 Compliance Plan applications the Gas Utilities continue efforts to communicate about the Cap and Trade program and engage with customers to meet the objectives outlined in the Cap and Trade Framework. The communication strategies will be tailored in an effort to ensure they maximize impacts and benefits to customers and include mediums such as bill inserts, webpages, customer call centre expertise, social media posts, and customer surveys.

Incremental customer outreach costs have almost entirely been eliminated from the Gas Utilities' 2018 Compliance Plans. Enbridge Gas noted that the communication strategies will be rolled out leveraging existing communication methods at no additional cost.<sup>109</sup> Union Gas has proposed a 2018 Cap and Trade customer outreach budget of \$8,000.

## **OEB Staff Submission**

OEB staff submits that the Gas Utilities 2018 customer outreach proposals are appropriate. OEB staff encourages the Gas Utilities to continue to find efficiencies and leverage existing communication strategies.

## **Issue 4 – Deferral and Variance Accounts**

The Cap and Trade Framework indicates that variance account balances should be apportioned between customer-related and facility-related obligations and that the

<sup>&</sup>lt;sup>107</sup> Oral Hearing Transcript, Volume 4, p. 56

<sup>&</sup>lt;sup>108</sup> Oral Hearing Transcript, Volume 2, p. 186

<sup>&</sup>lt;sup>109</sup> EB-2017-0224, Exhibit I.1.EGDI.STAFF.12

re-calibration of rates and any required true-ups should be done annually.<sup>110</sup> Further, the Filing Guidelines to the Cap and Trade Framework outlines the information that the Gas Utilities must include related to deferral and variance accounts when filing a Compliance Plan.

OEB staff makes submissions in the following areas related to deferral and variance accounts:

- Forecast and actual costs of gas and carbon related to RNG procurement within the GHG Emissions Compliance Obligation Customer-Related Variance Account (GHG-Customer VA)
- RNG Enabling Program and Geothermal Energy Services Program costs within the GHG-Customer VA
- 2016 GHG Emissions Impact Deferral Accounts
- Enbridge Gas' 2018 GHG-Customer VA and the 2018 GHG-Facility VA

## 1 – Forecast and actual costs of gas and carbon related to RNG procurement within the GHG Emissions Compliance Obligation Customer-Related Variance Account (GHG-Customer VA)

Enbridge Gas and Union Gas each anticipate to enter into ten-year fixed price contracts for RNG. Both utilities indicated that ratepayers will pay the same amount for RNG as they would for conventional natural gas (inclusive of carbon allowance costs) on a forecast basis. The balance of the RNG cost will be covered by funding from the government of Ontario. <sup>111,112</sup>

As part of Procedural Order No. 2, the OEB determined that the proposed RNG Procurement and Funding model does not require approval. The OEB noted that the model provides that ratepayers will not be allocated any costs arising from the incremental costs of gas associated with the procurement of RNG now or in the future. The OEB indicated that the Gas Utilities will have to obtain OEB approval for any allocation of such costs to ratepayers.

<sup>&</sup>lt;sup>110</sup> Cap and Trade Framework, Section 6.2.1, pp. 32-33

<sup>&</sup>lt;sup>111</sup> EB-2017-0224, Exhibit I.C.EGDI.CCC.10

<sup>&</sup>lt;sup>112</sup> EB-2017-0255, Exhibit 3, Tab 4, pp. 22-24

Enbridge Gas<sup>113</sup> and Union Gas<sup>114</sup> provided detailed descriptions and examples of how they will administer their respective Purchased Gas Variance Account (PGVA) and GHG DVA, including incorporating forecast gas costs and cost of carbon allowances. The two utilities confirmed that at the time of RNG procurement, a ten-year forecast of the costs for carbon allowances and natural gas will be used to determine the volume of RNG that can be procured, taking into account the amount of available government funding. The forecast gas costs for RNG will be fixed as of the time of the RNG procurement. Similarly, the cost of carbon allowances for each year of the RNG contract will be determined by using the most recent version of the OEB's LTCPF available at the time of contracting.

Enbridge Gas indicated that the Accounting Order for the PGVA will need to be updated to reflect the inclusion of RNG supply at a predetermined/fixed level.

## **OEB Staff Submission**

OEB staff submits that the proposed manner to administer forecast gas costs and cost of carbon allowances related to RNG contracts as set out in JT2.6 for Enbridge Gas and JT1.9 Union Gas are appropriate. OEB staff notes that based on the examples provided, ratepayers will not be required to pay any additional costs over and above the cost of gas and the cost of carbon related to RNG procurement.

# 2 – RNG Enabling Program and Geothermal Energy Services Program costs within the GHG-Customer VA

As part of a separate application<sup>115</sup> in front of the OEB, Enbridge Gas is seeking approval of an RNG Enabling Program<sup>116</sup> and Geothermal Energy Services Program. Enbridge Gas is not seeking any direction or approval related to these programs as part of its 2018 Compliance Plan application.

However, Enbridge Gas has proposed to capture any annual utility revenue sufficiency or deficiency associated with its RNG Enabling Program and Geothermal Energy Services Program within the GHG-Customer VA.

<sup>&</sup>lt;sup>113</sup> EB-2017-0224, Exhibit JT2.6

<sup>&</sup>lt;sup>114</sup> EB-2017-0255, Exhibit JT1.9

<sup>&</sup>lt;sup>115</sup> EB-2017-0319

<sup>&</sup>lt;sup>116</sup> RNG Enabling program would assist RNG produces in the process of upgrading raw, untreated biogas into pipeline quality RNG and the injection and transportation of this gas to market. It is distinct from the RNG Procurement model discussed above. EB-2017-0244, Exhibit C, Tab 5, Schedule 2, p. 12

Enbridge Gas' proposed RNG Enabling Program proposes to provide upgrading services (biogas, landfill gas, etc.) on an optional basis. As such, RNG producers will have the choice of upgrading biogas to pipeline quality themselves or having Enbridge Gas perform this function for them. All RNG producers who wish to use Enbridge Gas' distribution system to transport RNG will have to contract with Enbridge Gas for RNG injection services.<sup>117</sup>

Enbridge Gas' proposed Geothermal Energy Services program is focused on making geothermal systems more broadly available and implemented for customers who would otherwise be using natural gas for space and water heating.<sup>118</sup>

Enbridge Gas notes that over the respective lifetimes of both programs, the number of Cap and Trade allowances it will need to procure will reduce, resulting in lower overall compliance costs for all customers. As only those projects that have a profitability index of 1.0 or higher will proceed, Enbridge Gas claims that existing ratepayers will not be harmed and will benefit over the life of these programs.

Enbridge Gas proposes that the programs be treated as carbon abatement activities and that the revenue deficiencies in the early years, and sufficiencies in the later years, be captured within the GHG-Customer VA. Enbridge Gas indicates that this is appropriate as the objective of these programs is to reduce GHG emissions associated with natural gas deliveries and customers' consumption of natural gas.

## **OEB Staff Submission**

OEB staff does not support Enbridge Gas' proposal to include revenue deficiencies or sufficiencies within the GHG-Customer VA at this time. However, OEB staff submits that the merits and details of the RNG Enabling Program and Geothermal Energy Services Program are appropriately addressed in EB-2017-0319.

## 3 – 2016 GHG Emissions Impact Deferral Accounts (GGEIDA)

Enbridge Gas and Union Gas have sought approval of the disposition of each utility's respective 2016 balance in its GGEIDA at the next practical QRAM. The balances in the GGEIDAs are made up of incremental Cap and Trade staff salaries and wages, consulting and market research costs, other costs, and revenue requirement on capital costs.

<sup>&</sup>lt;sup>117</sup> EB-2017-0224, Exhibit C, Tab 5, Schedule 2, p. 13

<sup>&</sup>lt;sup>118</sup> EB-2017-0224, Exhibit C, Tab 5, Schedule 2, pp. 15-17

Enbridge Gas' 2016 GGEIDA balance is \$0.840 million, excluding interest. Enbridge Gas indicated that it will calculate interest associated with the 2016 GGEIDA balance prior to disposition.<sup>119</sup>

Union Gas' 2016 GGEIDA balance is a debit from ratepayers of \$2.225 million, plus interest of \$0.007 million, for a total debit from ratepayers of \$2.322 million.<sup>120</sup>

## **OEB Staff Submission**

OEB staff takes no issue with the amounts requested for disposition.

## 4 – Enbridge Gas' 2018 GHG-Customer VA and the 2018 GHG-Facility VA

Enbridge Gas is requesting the establishment of the 2018 GHG-Customer VA and the 2018 GHG-Facility VA, with the same parameters and accounting treatment as the 2017 versions of those accounts.<sup>121</sup>

## **OEB Staff Submission**

OEB staff submits that the request to establish two variance accounts – 2018 GHG-Customer VA and the 2018 GHG-Facility VA was not necessary. The OEB approved the establishment of these variance accounts on an ongoing basis in its 2017 Cap and Trade Decision and Order.<sup>122</sup> Therefore an accounting order should not be required to be submitted for every Cap and Trade Compliance Plan. However, OEB staff notes that the accounting order establishing the accounts included a reference to 2017. OEB staff submits that this reference should be removed going forward.

## Issue 5 – Cost Recovery

## Weighted Average Cost of Compliance

## Background

In the Cap and Trade Framework, the OEB determined that the customer-related and facility-related charges are to be set based on the Gas Utilities annual WACC. This

<sup>&</sup>lt;sup>119</sup> EB-2017-0224, Exhibit D, Tab 1, Schedule 2

<sup>&</sup>lt;sup>120</sup> EB-2017-0255, Exhibit 6, pp. 3-6

<sup>&</sup>lt;sup>121</sup> Exhibit F, T1, S1, p. 1

<sup>&</sup>lt;sup>122</sup> EB-2016-0296/300/330, 2017 Cap and Trade Decision and Order, Sept. 21, 2017

approach will ensure the matching of the Gas Utilities' forecast costs with the charges to customers.<sup>123</sup>

## Enbridge Gas

Enbridge Gas has proposed to deviate from the Cap and Trade Framework and use its annual carbon price forecast (of \$18.99 CAD) to represent the price of all compliance instruments for purposes of approximating the customer-related and facility-related obligation costs to set its cap and trade charges.

Enbridge Gas stated that the information required to calculate its weighted average cost of compliance (WACC) is strictly confidential, being either market or auction confidential as defined by the Cap and Trade Framework. Therefore, using its WACC at this time for rate setting purposes is not appropriate. In future Compliance Plan filings, Enbridge Gas will consider alternate rate setting approaches as additional details and methodologies become available.<sup>124</sup>

At the oral hearing, Enbridge Gas stated that it has yet to determine whether this approach would continue or whether the WACC would be a better mechanism. Enbridge Gas commented that a publicly available proxy price may be the best as we move forward, but this still needs to be determined.<sup>125</sup>

## **Union Gas**

Union Gas has also proposed to deviate from the Cap and Trade Framework and use its annual carbon price forecast (of \$18.99 CAD) to set its cap and trade charges.

Union Gas stated that the disclosure of its WACC would contravene the Climate Change Act by compromising the strict confidentiality of Union Gas' compliance instrument procurement plan. Union Gas also stated that the 2018 Compliance Plans will be largely based on compliance instruments and not abatement. In future years, as abatement comprises a more significant component of Union Gas' compliance plan, further review of the rate setting methodology may be required.<sup>126</sup>

<sup>&</sup>lt;sup>123</sup> EB-2015-0363, p. 31

<sup>&</sup>lt;sup>124</sup> EB-2017-0224, Exhibit B, Tab 4, Schedule 1, pp. 1-3 and Argument-In-Chief, pp. 16-17

<sup>&</sup>lt;sup>125</sup> Oral Hearing Transcript, Volume 4, pp. 55-56

<sup>&</sup>lt;sup>126</sup> EB-2017-0255, Exhibit 7, Tab 1, pp. 2-3 and Argument-In-Chief, p. 8

At the oral hearing, Union Gas clarified that the deviation from the Cap and Trade Framework regarding Union Gas not using its WACC to set its cap and trade charges will be revisited annually.<sup>127</sup>

## EPCOR

EPCOR has proposed to use its annual carbon price forecast (of \$19.00 CAD) to set its cap and trade charges.<sup>128</sup>

## **OEB Staff Submission**

The OEB's Cap and Trade Framework states that the use of the WACC will ensure the matching of the utilities forecast costs with the charges to customers.<sup>129</sup> OEB staff is of the view that the primary objective of using the WACC is to align the charges with the forecast costs of compliance in order to minimize the balance that would otherwise accrue in the Cap and Trade Variance Accounts. Given the lack of diversity in the 2018 compliance portfolio, OEB staff accepts the use of ICE for 2018 as being reasonable. However, OEB staff submits that this endorsement is for 2018 only and the onus should be on the Gas Utilities to justify in any future compliance plan application why any deviation from the OEB's Cap and Trade Framework is warranted.

## Issue 6 – Implementation

Following the OEB's Decision on the Gas Utilities' 2018 Compliance Plans, the Gas Utilities will incorporate their OEB-approved customer- and facility-related costs into rates. Union Gas proposed to implement final approved rates as part of the QRAM application that follows the OEB Decision and final rate order in this proceeding. Any differences between the amounts recovered in rates since January 1, 2018, and the implementation of final 2018 rates would be captured in the 2018 customer- and facility-related variance accounts.

## **OEB Staff Submission**

OEB staff submits that the OEB should approve the approach proposed by Union Gas.

All of which is respectfully submitted -

<sup>&</sup>lt;sup>127</sup> Oral Hearing Transcript, Volume 2, p. 184

<sup>&</sup>lt;sup>128</sup> EB-2017-0275, Exhibit 2, p. 11 and Exhibit 3, p. 26, Table 13

<sup>&</sup>lt;sup>129</sup> Cap and Trade Framework, p. 31