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May 19, 2017

Ontario Energy Board
2300 Yonge Street
27th Floor
Toronto, ON M4P 1E4

Attention: Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: Ontario Sustainable Energy Association
Reply Written Submission
File Numbers: EB-2016-0296 (Union Gas Limited) / EB-2016-0300 (Enbridge Gas Distribution Inc.) / EB-2016-0330 / (Natural Resource Gas Ltd.)

Please find enclosed Ontario Sustainable Energy Association's Reply Submission for the above noted files.

Yours truly,

Robert Woon

Encl.

cc: Nicole Risse, OSEA
Marion Fraser, Fraser & Company

Document #: 1205780

EB-2016-0300
EB-2016-0296
EB-2016-0330

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15 (Schedule B).

IN THE MATTER OF an Application by Enbridge Gas Distribution Inc and Union Gas Limited seeking approval of the Ontario Energy Board for their 2017 Cap and Trade Compliance Plans.

WRITTEN SUBMISSION OF ONTARIO SUSTAINABLE ENERGY ASSOCIATION

May 19, 2017

I. OVERVIEW

1 Enbridge Gas Distribution Inc. (Enbridge), Union Gas Limited (Union) and Natural Resource Gas Limited (together, the "Utilities") brought applications seeking approval of the Ontario Energy Board (Board) for their respective 2017 Cap and Trade Compliance Plans in accordance with the Board's Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities (Framework).[1]

2 The Ontario Sustainable Energy Association (OSEA) is generally supportive of the Utilities' 2017 Compliance Plans, taking into consideration the limited time

[1] EB-2015-0363, Report of the Board, Regulatory Framework for the Assessment of Costs of Natural Gas Utilities' Cap and Trade Activities, September 26, 2016 [Framework].

Utilities were provided to submit the 2017 Compliance Plans, that this is the first year of the program, and that there are few other jurisdictions with prior experience. OSEA notes that the Framework recognizes that the first 2017 Compliance Plan was meant to provide flexibility and allow the Utilities to gain experience before preparing more comprehensive and longer term plans for 2018 and subsequent years.[2]

3 However, OSEA expects that future compliance plans will be more comprehensive and consider, with detailed analysis and reasoning, various alternatives to comply with Ontario's Cap and Trade system.

4 OSEA submits that the Utilities' 2017 Compliance Plans are not reasonable or appropriate because the Utilities:

(a) have put forward strategies that rely entirely on purchasing credits. These strategies do not align with the emission targets of the Cap and Trade program to reduce GHG emissions in Ontario

(b) did not include an analysis of the comparative cost effectiveness of abatement versus allowances to allow the Board to assess if their respective 2017 Compliance Plans based primarily on procurement of allowances is a cost-effective approach

(c) failed to consider the long term ongoing GHG abatement and cost reductions that will occur from the use of conservation programs and implementing/funding sustainable energy projects (e.g. geothermal,

[2] Framework, p 16.

renewable natural gas, combined heat and power, micro combined heat and power, compressed natural gas, power-to-gas) and are still in the very early conceptual stage of potential abatement activities. To meet the requirements of the Cap and Trade program in a cost effective manner, Utilities should be conducting feasibility studies, pilot programs, and other investigations immediately to mitigate risk and be in a position to incorporate the abatement activities that will be required to meet Ontario's emission targets.

5 OSEA respectively submits that the Board direct the Utilities to conform to the Framework on all future compliance plans, including providing a full and detailed assessment of abatement activities, such as conservation and sustainable energy programs.

II. THE FRAMEWORK

6 The Framework sets out guiding principles for the Board's approach to assess the cost implications of the Utilities' Compliance Plans.

7 One of the factors that the Board must consider is

> *Whether a Utility has engaged in a strategic decision-making and risk mitigation, resulting in a Compliance Plan that is as cost-effective as possible in reducing its facility-related and customer-rated GHG emissions, and whether the Utility has considered a diversity (portfolio) of compliance options.*[3]

[3] Framework, p 21, section 5.3.

8 Section 5.3.1.1 of the Framework states,

> *The OEB expects a Utility to provide an overview of its strategy, including an outline of the activities that it proposes to take to meet its compliance obligations (such as procurement of allowances and offset credits, GHG abatement programs for natural gas customers, and GHG abatement and mitigation activities for the Utility's own facilities and operations, and the rationale behind their selection of compliance actions and activities.*[4]

9 The Framework further states

> *To assess the cost effectiveness of the Utilities' Compliance Plans, the OEB will require a Utility 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.*[5]

III. UTILITIES' COMPLIANCE PLANS ON ABATEMENT

A. ENBRIDGE

10 Enbridge's only customer abatement activity included in its 2017 Compliance Plan is home energy retrofits that will be funded through the Green Investment Fund.[6]

11 Enbridge stated that it considered several abatement and long-term investment opportunities for the 2017 Compliance Plan filing, including expanding the natural gas vehicle program, renewable natural gas, power-to-gas, combined heat and power, micro CHP or micro combined heat and power, solar geothermal heating and cooling systems, and the integration of those technologies with automated

[4] Framework, p 22.
[5] Framework, p 24, section 5.3.1.2.
[6] Enbridge Evidence, Exhibit C, Tab 2, Schedule 1, p 14.

controls.[7] However, Enbridge stated that it has not put forward business cases to support any of these abatement initiatives.[8]

12 Enbridge stated that it has been learning about renewable natural gas and the implications of the end cost of renewable natural gas. Enbridge stated that it has letters of intent with producers of renewable natural gas, as well as a memorandum of understanding with the Ontario Geothermal Association to create a model for geothermal energy in Ontario.[9] Enbridge intends to comment on these abatement activities in the next compliance plan.[10]

13 Enbridge did not include facility related abatement programs for 2017.

B. UNION

14 Union, similar to Enbridge, is only including home energy retrofits, funded by the Green Investment Fund, for its customer abatement program in its 2017 Compliance Plan.[11]

15 Union stated that it is considering other abatement opportunities such as combined heat and power, renewable natural gas[12] and compressed natural gas.[13] Union expects to address abatement in future compliance plans.[14]

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7 Transcript Volume 2, Examination in Chief of Steve McGill, pp 68-69 [Transcript Volume 2].
8 *Ibid*, Cross Examination of Enbridge Panel 2, pp 71-72.
9 *Ibid*, Cross Examination of Enbridge Panel 2, p 74.
10 *Ibid*, Cross Examination of Enbridge Panel 2, p 75.
11 Union Evidence, Exhibit 3, p 25.
12 Union Evidence, Exhibit 3, p 25.
13 Union Interrogatories Response, Exhibit B.Staff.14.
14 Transcript Volume 2, Examination in Chief of Union Panel 1.

16 Union is seeking government funding for proposals involving renewable natural gas and compressed natural gas. Union stated that it expects to incorporate renewable natural gas in its gas supply portfolio as early as 2018.[15] However, Union indicated that it is "still very exploratory with respect to RNG and some other initiatives."[16] It was unclear if Union would be able to perform the assessment and testing required to include renewable natural gas in the next compliance plan, despite stating that renewable natural gas would be incorporated into the gas supply portfolio by 2018. Union has not done any cost analysis for abatement measures for the 2017 Compliance Plan.[17]

17 Union did not include any new facility abatement programs in its 2017 Compliance Plan.[18] Union provided a description of its existing initiatives, such as converting its fleet vehicles from gasoline/diesel to compressed natural gas, which is still in an early pilot project stage, and upgrading its buildings to be more energy efficient.[19] Union is further conducting an engineering and feasibility study about other facility abatement opportunities and will provide the outcome of same in its 2018 Compliance Plan.[20]

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[15] Union Evidence, Exhibit 3, p 46.
[16] Transcript Volume 2, Cross-Examination of Union Panel 1, p 188.
[17] *Ibid*, p 187.
[18] Union Evidence, Exhibit 3, p 26.
[19] Union Evidence, Exhibit 3, pp 26-27.
[20] Union Evidence, Exhibit 3, p 28.

IV. THE UTILITIES' PROPOSED GREENHOUSE GAS ABATEMENT ACTIVITIES ARE NOT REASONABLE AND APPROPRIATE

A. UTILITIES PROVIDE NO COST ANALYSIS OF POTENTIAL ABATEMENT ACTIVITIES

18 OSEA submits that the proposed GHG abatement activities in the Utilities' 2017 Compliance Plans are not reasonable and appropriate because the Utilities did not include a comparison of costs of investing in abatement versus purchasing allowances.

19 The Utilities have included little to no customer or facility abatement activities in their respective 2017 Compliance Plans and rely on the procurement of allowances to meet their 2017 Cap and Trade compliance obligations.

20 The Framework states that a Utility may "develop a Compliance Plan in which the only activity proposed is the procurement of allowances (and offset credits), if the Utility has determined that this is the most cost-effective and reasonable approach."[21]

21 OSEA submits that the Utilities did not show in their evidence that allowances were the most cost-effective and reasonable approach as compared to abatement activities. The Framework requires the Utilities to provide a "comparison of costs of investing in GHG abatement activities versus procuring emissions units."[22]

[21] Framework, section 5.3.1.1.
[22] Framework, section 5.3.1.2.

22 The Utilities did not provide this comparison of costs[23] or undertake an analysis to determine the amount of incremental abatement that could have been achieved in 2017.[24]

23 OSEA finds the lack of comparison for conservation programs particularly surprising. The Utilities have extensive experience with conservation programs with their DSM programs. It would not have been difficult to consider and assess additional conservation measures not already included in the Utilities' respective DSM programs.

24 OSEA submits that the Board cannot assess the cost effectiveness of the Compliance Plan if the only costs presented in the Compliance Plan are that of procuring emission allowances.

B. UTILITIES SHOULD HAVE BEEN PLANNING AHEAD TO START INVESTIGATING POTENTIAL ABATEMENT ACTIVITIES

25 The Utilities indicate that the timing and uncertainties of various elements of the Cap and Trade program posed a challenge to including abatement in the 2017 Compliance Plans.[25]

26 OSEA acknowledges that the Framework was released in September 2016 and that the 2017 Compliance Plans were required to be filed in November 2016.[26] Though this time period may not have been sufficient to develop and implement new abatement activities, OSEA submits that the Utilities should have been

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23 Transcript Volume 2, Cross Examination of Enbridge Panel 2, page 12; Transcript Volume 2, Cross Examination of Union Panel 1, p 176.
24 Transcript Volume 2, Cross Examination of Enbridge Panel 2, page 15; Transcript Volume 2, Cross Examination of Union Panel 1, p 176.
25 Union Argument in Chief, p 12; Enbridge Argument in Chief, p 17.
26 *Ibid*, Cross Examination of Union Panel 1, page 150.

further along in development of potential abatement activities. In addition, as set out above, this timing should not have precluded assessment of additional conservation measures.

27 The Utilities were aware of the pending Cap and Trade regulations well before September 2016. The draft Cap and Trade regulation was posted in the winter of 2015/2016, and the final regulation was posted in May 2016.[27] Further, the Board's draft report and discussion paper were available in 2016 prior to the issuance of the final Framework.[28]

28 OSEA submits that the Utilities could have reasonably anticipated inclusion of abatement measures in the Cap and Trade program. Through the regulations, the Utilities would have been aware of their responsibility for addressing their customer's allowances and GHG emissions in May 2016.[29]

C. ACTION REQUIRED NOW IN 2017 TO MEET OBLIGATIONS IN THE FUTURE

29 The progress of the Utilities' assessment and inclusion of abatement activities is important in assessing the reasonableness and appropriateness of the 2017 Compliance Program. It is not reasonable or appropriate for the Utilities to have conducted no feasibility studies, pilot programs, or other preliminary assessments in 2017. Utilities must be taking greater steps now in order to meet their future compliance obligations.

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[27] ICF, Impacts of Ontario's Proposed Climate Policy Kick-off Meeting, July 7, 2015, filed in Exhibit I.1.EGDI.SEC.4, p 40.

[28] Transcript Volume 2, Cross Examination of Union Panel 1, p 139.

[29] Transcript Volume 2, Cross Examination of Union Panel 1, p 138.

30 The government of Ontario has set significant emissions reductions targets. Ontario's emissions reduction target for 2020 is set at 15% below 1990. The target for 2030 is 37% below 1990 levels.[30]

31 Enbridge's consultant, ICF International, concluded that in order to achieve the Ontario's 2030 reduction target, residential, commercial and institutional natural gas consumption will need to be reduced by 40% to 50%.[31] ICF International also expects that there will need to be no net increase in natural gas consumption for electricity generation, and electricity demand will need to be met with non-fossil sources such as nuclear, hydro, and renewables.[32] Further, the rate of energy efficiency, DSM and incentives will need to be increased.

32 The Framework recognizes that abatement programs are a key part of the effort to reduce Ontario's GHG emissions.[33]

33 OSEA submits that the Utilities should be actively exploring and implementing potential opportunities to reduce their customer and facility related emissions and mitigate their risks in order to achieve the necessary emissions reductions targets. Between Union and Enbridge, natural gas contributes to roughly one third of Ontario's total emissions.[34] The Utilities have a significant role in meeting Ontario's emission targets, reducing GHG emissions overall and help addressing climate change.

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[30] ICF, Impacts of Ontario's Proposed Climate Policy Kick-off Meeting, July 7, 2015, filed in Exhibit I.1.EGDI.SEC.4.
[31] *Ibid*, p 33.
[32] *Ibid*.
[33] Framework, p 21.
[34] Transcript Volume 2, Cross Examination of Union Panel 1, p 185; ICF, Impacts of Ontario's Proposed Climate Policy Kick-off Meeting, July 7, 2015, filed in Exhibit I.1.EGDI.SEC.4, p 7.

34 OSEA submits that Utilities should be investigating other jurisdictions that have already implemented renewable energy initiatives to consider the benefits and attributes of these technologies for implementation in Ontario.

35 OSEA submits that the Utilities should have included a more detailed analysis of potential abatement activities in the 2017 Compliance Plans. The Utilities must include an assessment of abatement activities in future Compliance Plans, and where the abatement activities are shown to be cost-effective, considering long term costs and abatement, the activities should be included as an activity in the Compliance Plan.

36 In order to implement abatement activities in the near future, it is reasonable to expect the Utilities to be beyond the exploratory stage in 2017.

D. STRATEGIC VALUE OF INVESTMENTS IN RENEWABLE ENERGY

37 As the annual cap declines each year, the corresponding price of allowances is expected to increase. The Cap and Trade Program Regulation provides for an annual 5% price increase and indexation based on the consumer price index.[35]

38 Absent an Ontario based program, the Utilities will still have to comply with a Federal Program. The Pan-Canadian Pricing on Carbon Pollution sets a benchmark for pricing carbon emissions. For jurisdictions with a price-based system, the price on carbon would start at a minimum of $10/tonne in 2018 and rise by $10 a year to reach $50/tonne in 2022. For provinces with cap and trade, there will be a 2030 emissions reduction target equal to or greater than Canada's

[35] Environmental Commissioner of Ontario, "Introduction to Cap and Trade in Ontario", p 17.

30% reduction target, as well as declining annual caps to at least 2022 that are equal or greater to what would be achieved by a direct price.[36]

39 The provincial and federal government's commitment to carbon pricing requires the Utilities to consider, assess and implement abatement activities in order to mitigate the effect of increasing carbon pricing on rate payers.

40 As iterated in the Framework, "although some longer-term investments in GHG abatement may be more expensive than the price of emissions units in any given year, there may be strategic value in investments that decrease emissions over the longer term."[37]

41 OSEA submits that the Utilities should be investing in methods to reduce the cost of renewable and sustainable energy, so that these technologies can become more cost effective. Many renewable technologies may be currently more expensive than the price of emissions, but the value of switching customers over to sustainable energy that produce lower or no GHG emissions has strategic value over the long term. OSEA supports Enbridge's statement that it can "achieve decarbonization and renewable content through the commercialization of less mature technologies".[38]

42 Investments in customer and facility abatement will reduce the amount of GHG emissions, decrease the Utilities' emissions obligations and allow the Utilities to purchase fewer allowances. This will be beneficial as the price of allowances

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36 Government of Canada, Government of Canada Announces Pan-Canadian Pricing on Carbon Pollution, October 3, 2016, < http://news.gc.ca/web/article-en.do?nid=1132149>

37 Framework, page 23.

38 Enbridge Argument in Chief, p 15.

increases with each auction. In addition to the environmental benefits of this approach, fewer allowance purchases would reduce the cost burden on rate payers.

43 The Utilities have indicated their intention to incorporate the abatement activities into future Compliance Plans. However, the lack of details of any real preliminary assessment is concerning. It also raises questions about timing of implementation and the requirement to meet province-wide emission targets.

V. CONCLUSION

44 OSEA submits that the Utilities' 2017 Compliance Plans are not reasonable or appropriate because the Utilities do not include an analysis of the comparative cost effectiveness of abatement activities versus allowances. In addition, the Utilities have failed to take any steps to mitigate their risks. If the price of allowances is significantly higher than forecasted, the Utilities will still have no choice but to purchase allowances. The Board cannot assess the cost effectiveness of the Utilities' Compliance Plans without understanding the cost implications of incorporating potential abatement activities.

45 OSEA submits that the proposed abatement activities are not reasonable and appropriate because the progress of the Utilities' development and incorporation of the proposed abatement activities are not aligned with the timing of the emission targets of the Cap and Trade program to reduce GHG emissions in Ontario.

46 The Utilities have a significant role to play in assisting Ontario to meet the reduction target, reducing GHG emissions overall and addressing climate change. The Utilities should be actively expanding potential opportunities to reduce their customer and facility related emissions in order to achieve the necessary emissions reductions targets.

47 In addition, the Utilities should investigate methods to reduce the cost of renewable and sustainable energy that will ultimately reduce the GHG emissions, reduce the cost burden on rate payers, and add strategic value over the long term.

48 OSEA respectively submits that the Board direct the Utilities to conform to the Framework on all future compliance plans, including providing a full and detailed assessment of abatement activities, such as conservation and sustainable energy programs.

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