

REFERENCES REFER TO THE COMMON EVIDENCE OF THE UTILITIES

REF: EX.B., TAB 1, PG. 4

Preamble: The evidence states: "Relative to CO₂, methane has the effect of creating 21 times more greenhouse gases ("GHGs")."

1. Please provide the basis for this statement and a reference to the source of this information.

REF: EX.B., TAB 1, PG. 5

Preamble: The evidence states: "The electrical conversion efficiency of these on-site generators is normally less than 40%."

2. Electric conversion efficiency.
 - a. Is the stated efficiency taking into account a refined stream that has removed the carbon dioxide component?
 - b. Is the stated efficiency assuming no utilization of the excess heat?
 - c. Was the 40% figure used in the Utilities assessment of other alternative uses for the Biogas?

REF: EX.B., TAB 1, PG. 8

Preamble: The Ministry said it had contributed significant funding, resources and training to establish the biogas sector and would continue to support the industry through training opportunities and technology improvements.

3. Ontario Ministry of Agriculture and Food and Rural Affairs (OMAFRA)
 - a. Did the Utilities approach the OMAFRA to determine their willingness to provide funding or low interest loans to reduce the capital costs of Biomethane? If so,
 - i. What alternatives were discussed?
 - ii. What is the status of discussions?
 - iii. Please provide any documentation of requests, meeting minutes, etc. that outline communications undertaken with the OMAFRA.

- b. If not, why not?

REF: EX.B., TAB 1, PG. 10

Preamble: The evidence states: "It is the view of the Utilities and the experts retained for the purpose of this Application that, unless RNG prices are set (as proposed in the RNG Program), a viable RNG industry will not develop in Ontario in the near term". The Utilities have proposed a market construct sets the price for RNG from suppliers.

4. Please provide the terms of reference that were used to engage the respective experts.
- a. Did the Utilities evaluate the potential of having prospective suppliers of RNG bid for the opportunity to provide their biomethane to the Utilities? If so,
- i. Please provide the analysis that was done to reject this alternative including all studies and assumptions that were used to inform this decision.
- ii. What assumptions were made about the range of ROE that suppliers could use to establish their bid price.
- iii. What range of biomethane prices did the analysis project?
- b. If not, why was this alternative not considered?
- i. Please provide all documentation of considerations and assumptions that contributed to the decision not to evaluate a using bids to establish a market price for RNG.

REF: EX.B., TAB 1, PG. 11

Preamble: The evidence states: "Following this maturation process, RNG should be able to compete with conventional natural gas supplies."

5. RNG competition with conventional natural gas supplies.
- a. What evidence have the Utilities provided that support this statement?
- b. What assumptions have the Utilities made in developing this conclusion? Please provide a summary of the assumptions and data.

REF: EX.B., TAB 1, PG. 15

Preamble: The evidence states: "Written letters of support offered by stakeholders are attached in Exhibit B, Tab 1, Appendix 2".

6. Letters of Support.

- a. Did the Utilities provide a script or framework to these stakeholders to solicit their support in preparing their letters of support?
- b. Do the Utilities have letters that were provided without solicitation? If so, please provide those letters..

REF: EX. B., TAB 1, PG.16

Preamble: The evidence states: "In the first phase, customers will have the option of designating 10% of the natural gas they use as RNG. FortisBC will then inject the equivalent amount of renewable gas into its system."

7. FortisBC experience. Please provide for year end 2011 (or the latest data in 2011):

- a. The number of customers who chose this option broken down between residential and business.
- b. What percentage of the total customers do the positive electors represent?
- c. The total GJ of Biomethane designated for 2012.
- d. The percentage of total distribution sales that the designated Biomethane volumes represent.

REF: EX. B., TAB 1, PG.17

Preamble: The evidence states: "The NARUC resolution on RNG urged the U.S. Congress to pass legislation to provide 'unequivocal support for pipeline quality RNG development in order to achieve significant greenhouse gas reductions in the transition to a clean energy economy'."

8. NARUC follow-up:

- a. Has the legislation been passed?

- b. If so, what insights can be learned from their direction that are applicable to the Ontario market?

REF: EX. B., TAB 1, PG. 20

Preamble: The evidence states: " According to the report prepared by Alberta Innovates and attached as Exhibit B, Tab 1, Appendix 1, the use of near-term RNG could lead to a potential reduction in GHG emissions of approximately 13 million tonnes of CO₂e, or more than 45% of Ontario's 2020 GHG emissions reduction target."

- 9. Potential Reduction of 45% of Ontario's 2020 GHG emissions reduction target
 - a. Is the 45% calculated using the Utilities proposed annual caps of a total of 5.5PJ?
 - b. If not, please provide the emission reduction figure that corresponds to 5.5PJ cap.

REF: EX. B., TAB 1, PG. 21, 24-25

10. Duration and Capacity Allocation

- a. Does the proposed duration account for the need for an Environmental Assessment on newly proposed facilities?
- b. Given the Utilities proposed selection criteria of first-come, first-served for constrained allocation, how do the Utilities propose the waiting period for Environmental Assessment be handled (i.e., are there capacity allocations that are in the cue pending results)?
- c. Will there be any financial consideration required of organizations that are holding spots in the cue, at interest or contracting, when they may not bring Biomethane to the system?

REF: EX. B., TAB 1, APPENDIX 3, PG. 5

Preamble: A survey with an unweighted probability sample of this size (n=1052) and a 100% response rate would have an estimated margin of error of +/-3.1 percentage points, 19 times out of 20, of what the results would have been had the entire population of residential natural gas customers in Ontario been polled. Sub-population results have a larger error margin. Within the residential sample of 1052 respondents, 632 were customers of Enbridge, and 420 were customers of Union. Participants for the residential survey were drawn from Ipsos Reid's iSay proprietary panel.

11. IPSOS Methodology

- a. Given that the residential customer were chosen from a membership of Ipsos panel, does Ipsos consider the survey to be without bias and an "unweighted probability sample"?
- b. What, if any, impact does the response in a. have on the expected range of error? Please quantify.
- c. Please explain the application of the sentence "Sub-population results have a larger error margin" in this study.

REF: EX. B, TAB 1, APPENDIX 1, PG. v, vi

Preamble: The evidence states: "Anaerobic digestion has the potential to produce 1372 M m³/yr (31% of total) and represents the near-term potential of all the RNG production in Ontario. The use of gasification has the potential to produce most of the RNG as we estimated that an additional 3063 M m³/yr (69% of total) can be produced by this process, however this potential would be realized over the long-term through further technology development.". Further, the Potential Timeline for RNG in Ontario figure on page v shows the advent of RNG Production from Gasification beyond the initial 5 horizon of the Utilities proposed program offering.

12. Contribution of Gasification to RNG

- a. What technological development is required to make gasification a viable source of RNG in Ontario?
- b. What investment would be required?

- c. How would that be encouraged if potential gasification providers face a potentially constrained demand market (system capability) that is met in part by Anaerobic Digestion suppliers who have firm supply prices guaranteed?
- d. Asked differently, would the establishment of the Utilities RNG program aid or inhibit the opportunity for Gasification providers to invest in overcoming the technological hurdles referred to in the evidence? Please explain the answer including all assumptions and forecasts utilized to develop the conclusion.