

Ontario Energy Board

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B; and in particular section 36 (2) thereof;

AND IN THE MATTER OF an application by Enbridge Gas Distribution Inc. for an Order or Orders approving and setting the cost consequences associated with the purchase of Ontario biomethane by Enbridge Gas Distribution Inc.;

AND IN THE MATTER OF an application by Union Gas Limited for an Order or Orders approving and setting the cost consequences associated with the purchase of Ontario biomethane by Union Gas Limited.

LONDON PROPERTY MANAGEMENT ASSOCIATION

(“LPMA”)

CROSS-EXAMINATION COMPENDIUM

Proposed Business Model

- Enbridge establishes a competitive price for bio-methane and signs long-term supply contracts with producers
- Enbridge sells this gas to interested marketers and direct purchase customers as a pass-through on long-term contracts
- Marketers offer premium 'green gas' to customers wanting benefits of carbon credits, branding and sustainability opportunities
- Any bio-methane not sold to marketers comingled with regular supply for system gas customers



Draft & Confidential

ENBRIDGE GAS DISTRIBUTION INC.
UNION GAS LIMITED
RESPONSE TO BOARD STAFF INTERROGATORY #4

1.0 Role of the Utilities

Issue 1.2 - Is the proposed role of both Enbridge and Union in developing and implementing a biomethane program reasonable and appropriate?

Reference: Prefiled Evidence / Exhibit B/Tab 1/page 14/ lines 14-16

Union and Enbridge met face-to-face with energy retailers to discuss the biomethane program.

- a) What were the main discussion points and concerns raised by the energy retailers in these meetings?
- b) What was the anticipated role of the energy retailers in the proposed biomethane program?

Response:

- a) Please see response to Board Staff Interrogatory #3 (Exhibit I-1-3).
- b) EGD originally conceptualized a business model where the utility would purchase RNG supply from producers on contracts and then offer that supply to energy marketers. Marketers could then offer this supply to their customers. Any excess supply would have then been co-mingled with conventional gas supply for system gas customers. Further internal review and review with Union demonstrated that the Utilities could not “broker” gas to energy marketers, and the issues of recovery and disposition of the potential mismatch between purchase costs and marketer prices was still unresolved, which led to the current RNG Program.

Biogas to Biomethane

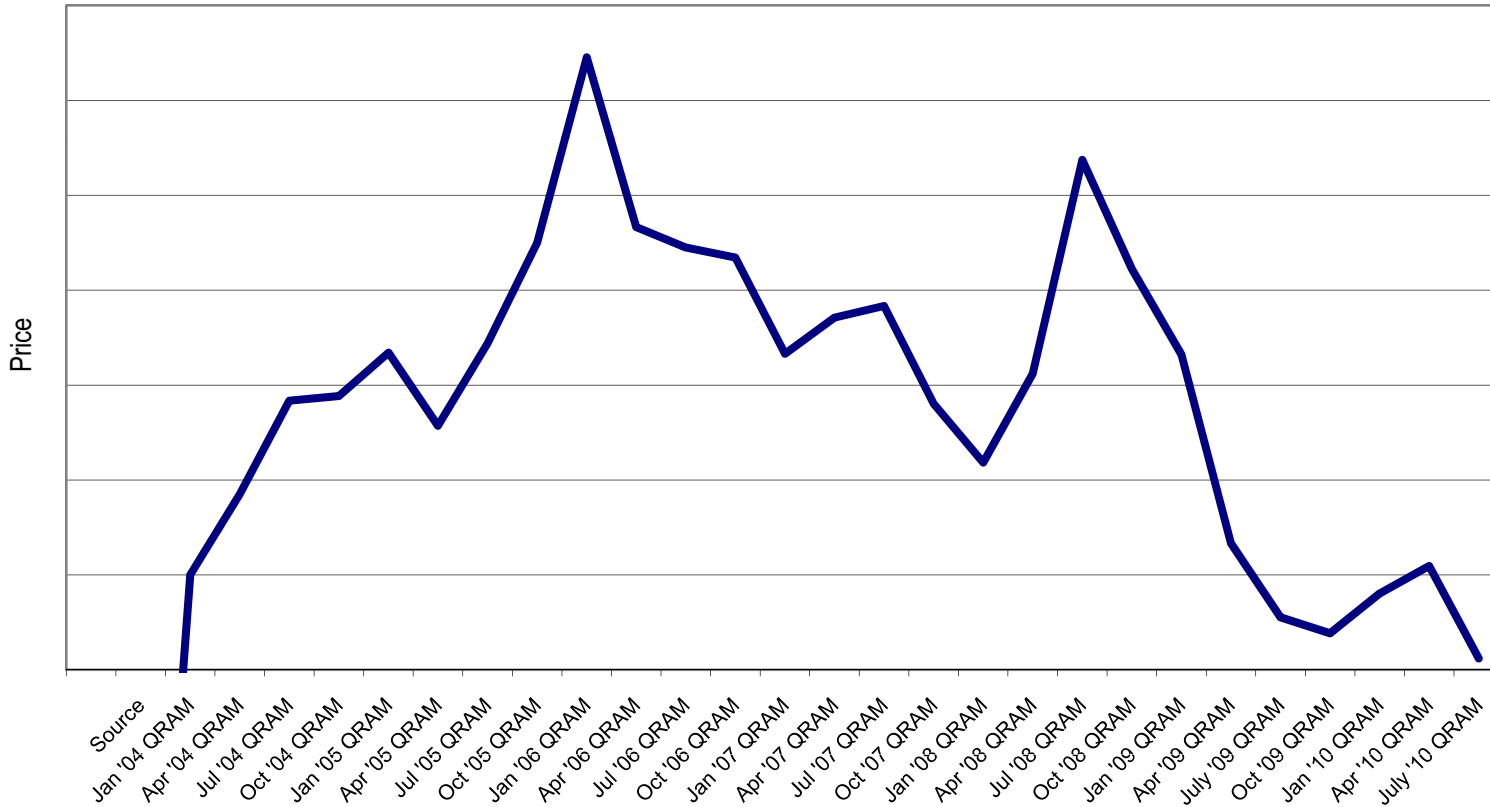
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- Biogas/landfill gas is being upgraded to produce biomethane in many parts of the world utilizing existing, commercially available technology
- Developing biomethane is not a technology issue, it is a market issue: the cost to create biomethane is greater than the current market price of natural gas
- This summer an agricultural based biogas digester project in Abbotsford B.C. came on-line, injecting biomethane into the Terasen Gas pipeline system

Natural Gas Price Volatility

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Ontario Landed Reference Pricing 2004 to Present



Critical Components of Renewable Contracts

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- In order to establish a biomethane market, several contract components will need to be in place:
 - Long-term contracts
 - Prices that enable producers to earn a reasonable return on investment
 - Ability to recognize proponent's increasing O&M costs
 - Ownership provisions of the environmental attributes (carbon credits)

Why Utilities Should Play a Key Role in RNG

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- Utilities uniquely positioned
- Customers to receive more sustainable product
- Those wanting 0% or 100% RNG have option to purchase supply from marketers
- Complements existing Ontario public policy

ENBRIDGE GAS DISTRIBUTION INC.
UNION GAS LIMITED
RESPONSE TO BOARD STAFF INTERROGATORY #8

1.0 Role of the Utilities

Issue 1.2 - Is the proposed role of both Enbridge and Union in developing and implementing a biomethane program reasonable and appropriate?

Reference: Prefiled Evidence / Exhibit B/Tab 1/Appendix 1/pages v-vi

- a) Please list existing biomethane suppliers, both landfill and anaerobic, in Ontario.
- b) Please indicate existing suppliers that have infrastructure that can enable connection to the gas distribution systems in the near future without major capital investments.
- c) Please provide an estimate of the amount of capital investment (pipeline and infrastructure) required by producers to connect to the distribution system, that would be economically supported under the proposed pricing structure and contractual arrangements?

Response:

- a) Only one biomethane supplier exists in Union's franchise area. A WWTP operated by the City of Hamilton is commissioning a project for injection of biomethane into Union's nearby distribution service.
- b) In Ontario, there are a number of anaerobic digester and landfill projects either in commercial operation or under development to utilize untreated biogas to generate electricity or for direct use of biogas as a low-heating value fuel supplement. There are no existing suppliers that have infrastructure in place to enable connection to the gas distribution system. Biogas projects in Ontario that the Utilities are aware of include:
 - 8 anaerobic digester projects in commercial operation generating electricity under OPA FIT contracts
 - 33 additional digester projects awaiting Notice to Proceed under OPA FIT contracts
 - 1 landfill gas project in commercial operation generating electricity under OPA FIT contract
 - 3 additional landfill projects awaiting Notice to Proceed under OPA FIT contracts
 - Biogas projects operating under the OPA Renewable Energy Standard Offer Program (RESOP):
 - Waterloo Landfill, Waterloo, ON

ENBRIDGE GAS DISTRIBUTION INC.
UNION GAS LIMITED
RESPONSE TO BOARD STAFF INTERROGATORY #14

4.0 Cost Allocation

Issue 4.1 - If approved, is the proposed assignment/recovery of the incremental costs of biomethane reasonable and appropriate?

Reference: Prefiled Evidence / Exhibit B/Tab 1/ page 25 line 23 to page 26 line 21

- a) Please discuss the Request for Proposal process the companies will employ to secure the biomethane resources to include as part of its supply portfolio.

Response:

- a) The Utilities are not proposing a “Request for Proposal” process. The RNG Program launch will be announced on the Utilities’ websites and program information will be shared with the industry in general through electronic correspondence, meetings, and appropriate conferences/forums (e.g., Canadian Farm & Food Annual Biogas Conference and Exhibition).

ENBRIDGE GAS DISTRIBUTION INC.
UNION GAS LIMITED
RESPONSE TO AGRIENERGY PRODUCERS' ASSOCIATION OF ONTARIO
INTERROGATORY #8

Connection Costs

B, T1, App. 4 and C – Monthly Fixed Charge for Producers

In some other jurisdictions, notably British Columbia and Germany, the utility pays either the whole connection cost to the grid (B.C.) or shares the cost with the producer. What would be the impact on the customer bill if the utility paid:

- (i) fifty percent of the connection cost of farm-based projects,
- (ii) one hundred percent of the connection cost of farm-based projects.

Response:

EGD and Union are proposing that the costs associated with connecting a RNG producer to their distribution systems be borne by the producer through a contribution in aid of construction. This approach ensures that the connection costs have no negative impacts on distribution customers.

The connection costs are factored in the RNG producer costs when the RNG program is designed. Reduction in the connection costs will result in a reduction of the RNG prices paid to the producers.

If the target volume of RNG remains the same, this change will translate to a reduction of RNG gas cost, but an increase in distribution costs arising from an increase in rate base.

ENBRIDGE GAS DISTRIBUTION INC.
UNION GAS LIMITED
RESPONSE TO BULLFROG POWER INC. INTERROGATORY #1

ISSUE 1 - Role of the Utilities

Aside from the Ipsos Reid survey conducted (Ex. B, Tab 1, App. 3):

- (a) What examinations have Union Gas Limited (“Union”) and Enbridge Gas Distribution Inc. (“Enbridge”) performed to evaluate the impact of this initiative on the retail market, and in particular the retail market for RNG?
- (b) In what ways and to what extent will the proposal affect the current and future retail market?
- (c) Please provide all relevant information on the anticipated impact, including pricing, volumes, access to distribution, etc.

Response:

- a) The Utilities have not conducted a formal examination of the impacts on the retail market.
- b) Refer to a). Generally the program would have the effect of raising current system gas costs, thereby indirectly increasing the financial competitiveness of all alternate retail supply options.
- c) Refer to a). The Utilities do not have any information on the anticipated impact regarding pricing or volume as it relates to retailers.

At Union, access to distribution is open to retailers who want to contract with RNG suppliers to transport their gas using the existing M13 rate. The RNG Program will have no impact on this access for retailers who want to contract with RNG suppliers.

EGD may, in the future, develop a transportation rate for RNG producers who do not participate in the Utilities’ RNG Program but wish to connect to EGD’s network. This application does not preclude retailers from participating in Ontario through open access to the distribution system and does not affect any arrangements that retailers may have or plan to have with sources of supply outside of Ontario.

ENBRIDGE GAS DISTRIBUTION INC.
UNION GAS LIMITED
RESPONSE TO BULLFROG POWER INC. INTERROGATORY #6

ISSUE 2 – Cost Consequences

What other mechanisms did Union and Enbridge consider to establish a price for RNG that would be paid to suppliers?

- (a) Why were those other mechanisms rejected?
- (b) Would Enbridge and Union be open to holding a small request for proposals for RNG (for example, a volume of 500,000 GJ/year) in order to test the pricing that suppliers are prepared to take and provide the Board with actual data?
 - (i) If not, why not?

Response:

Please see response to Board Staff Interrogatory #5 (Exhibit I-1-5).

- a) EGD and Union considered the merits of a Request For Proposal (“RFP”) for RNG supply.

This mechanism was not preferred on the following basis:

- i. The cost to conduct an RFP process(es)
- ii. The need and cost to evaluate the distribution and transmission systems to determine where projects may or may not be able to connect to provide an RFP process with connection limit information
- iii. The potential need to conduct a second or third RFP process to achieve meaningful volume levels
- iv. The potential for suppliers, particularly less sophisticated ones, to be unable to participate due to the cost and complexity of an RFP process
- v. The experiences of the Ontario Government and the Ontario Power Authority with respect to RFPs for less sophisticated or bi-product producers, which have resulted in the creation of standard offer programs.

- b) EGD and Union will not consider holding a small scale RFP for RNG at this time. Please see response to part a) above.

ENBRIDGE GAS DISTRIBUTION INC.
UNION GAS LIMITED
RESPONSE TO CONSUMERS COUNCIL OF CANADA INTERROGATORY #2

ISSUE 1 - ROLE OF THE UTILITIES

What is EGD/Union's contribution to enabling the development of a viable RNG industry in Ontario?

Response:

EGD and Union are making the following contributions toward enabling the development of a viable RNG industry in Ontario:

- The Utilities have investigated the potential for the development of a RNG industry in Ontario including, but not limited to, customer attitudes, equipment availability and capability, sources of supply, and health and safety. These contributions have culminated in this application.
- The Utilities have examined in depth the gas composition and specification requirements to facilitate RNG injection and are prepared to provide physical access to their distribution systems for potential producers.
- The Utilities have proposed a solution/means of enabling an RNG industry by virtue of this application.