

**Re: EB-2011-0242 (Enbridge Gas Distribution Inc.), EB-2011-0283 (Union Gas Limited)**

**Argument in the above proceeding on behalf of Ag Energy Co-operative Ltd.  
(Also known as Ag Energy)**

Ag Energy is an independent, member-owned co-operative formed in 1988 to provide energy products and services to its members. The membership represents approximately half of all natural gas consumption by greenhouse flower and vegetable growers in Ontario. The electricity program supplies approximately one third of all the electricity consumed by Ontario farm operations. Recently, Ag Energy expanded its membership base to include agri-food and agri-tech companies. Ag Energy's role is to "commercialize energy policy for the benefit of Ontario agriculture" while working closely with all stakeholders. Because of this distinct role as an industry advocate, Ag Energy enjoys good relations with all agricultural organizations and associations.

Ag Energy has been working with members to evaluate the viability of biogas projects. As such, the renewable natural gas initiative (RNG) by Enbridge Gas and Union Gas is of interest and concern to Ag Energy and its membership. The outcome of the proceedings including the pricing, terms and conditions of an RNG offering will likely impact Ag Energy, its members and customers.

While we have not been an active intervenor in the proceedings, we have reviewed the evidence, the interrogatory responses and the transcripts of the hearing including the argument by Enbridge and Union. We would like to submit the following positions with respect to the above proceedings.

Ag Energy supports the proposal by the applicants to purchase RNG from biomethane producers in Ontario as part of the LDCs' system gas purchases. We believe that the prices put forward and the volumes contemplated are deemed reasonable given currently economic conditions. We would also like to provide commentary on the following issues and opportunities.

**Benefits of RNG**

We believe there are a number of benefits created by the development and sustainability of an RNG market in Toronto. These benefits were set out in transcripts\_EGDI\_Union\_vol\_4\_20120503, in the Argument by Mr. Cass on page 138 where in he referred to the benefits set out by OMAFRA in Exhibit KP1.1 Tab 6, page 3. The benefits are restated as follows:

**Environmental and Societal Benefits of Using RNG from Farm and Food-Based Biogas Systems**

In addition to the climate change benefits associated with using methane from a non-fossil fuel source, when markets for RNG can be found, the operation of farm and food-based biogas systems results in benefits that include:

### **Material treatment:**

- **Emissions reduction:** the storage, land application, or disposal of untreated manure and food waste can produce greenhouse gas or smog-forming emissions. By harvesting the carbon in a biogas system and using it as RNG, emissions from conventional processes are avoided.
- **Odour reduction:** manure and food waste used in biogas systems might otherwise have contributed to odour emission when handled in other conventional manners. Digesting these materials in a biogas system results in odour reduction, contributing to reduced nuisance issues in rural and urban-fringe areas;
- **Pathogens:** operating a biogas system with manure as a primary input results in a reduction in pathogens (such as E .coli). Reducing pathogens at the source adds another barrier to reduce risk for surface and groundwater drinking sources, contributing to source water protection objectives in the province;

### **Waste management for food wastes and by-products:**

- **Avoid land filling:** By using food waste as a biogas input, food waste and food processing by-products that are currently land-filled can be diverted. While a portion of the methane emissions from landfills can be captured once a landfill is capped, it is much more efficient to harvest this methane directly and fully in a biogas system.
- **Reduced waste management costs for the food sector:** Directing food waste and by-products to biogas systems will in general result in lower handling costs for food waste compared to other management approaches (landfill, compost, and land-application). Conventional waste management approaches can be expensive since food wastes can be wet, sloppy, odorous, and may be generated through the winter (requiring storage solutions). Biogas systems have the ability to deal with all of these issues and potentially be a good destination at a lower cost. The result is that Ontario's food sector can avoid some costs and stay competitive with other jurisdictions.
- **Recycling of nutrients and carbon to the land:** When food wastes are digested in biogas systems and the digestate effluent is returned to agricultural fields and spread like manure, the result is that agricultural nutrients like nitrogen, phosphorous and potassium are returned to the soil. The indigestible carbon component in food wastes will also contribute to soil health, building up organic matter. This is an improvement compared to land filling or sewer discharge of food wastes, where these nutrients and carbon are lost.

### **Rural economic development:**

- **Local fuel production:** Instead of sourcing energy from other jurisdictions, local companies become generators of fuel, meaning that energy dollars are kept in the province;
- **Local synergies:** Locating biogas systems near the waste sources or near the destination for effluent end products means that jobs, transportation and tax revenue stay local. This approach closes the loop on the farm and food production system.

We agree with the points listed above and support the economic benefits of energy production in Ontario. More importantly, we believe that reinvesting in the local economy, job creation, technologies and income generated and tax base diversification in Ontario are important goals to be supported for a stronger, more sustainable future.

## Developing an RNG Market

We agree with the position of the applicants that there is currently no sustainable RNG industry in Ontario. We also agree that it is unlikely that an RNG industry will develop without some form of intervention to assist in developing the industry. The very high barriers to entry, such as initial capital cost investment, requires a long term purchase commitment for the production in order to generate a reasonable return. The prices proposed for the purchase of RNG are intended to generate a targeted 11% ROE, which seems reasonable, given the similar returns from the FIT program for electricity generation. We believe that the proposed solution addresses this need as summarized by Mr. McLean in transcripts\_vol2\_Union\_Enbridge\_20120430, Page 14 lines 8 – 28 page 15 lines 1 - 18

On balance, the utilities have recommended the approach we have because it leverages the actual positions and strengths of us, the utilities, and also, importantly, it will succeed, in our view, in enabling the RNG market, which is why we are here.

In effect, we're trying to maximize program results, while sticking as close to our competencies and our involvement in the marketplace.

Regarding supply, the utilities currently purchase supply for its system gas customers. We have carefully considered the cost impact on customers and have limited the program within the parameters that are clear and bounded.

Our customers have told us that they support programs of this type provided they are affordable, and what we have identified through the market research is that that affordability is 2 percent of residential customer's bill, or \$18 per year after five years, which will be the culmination of the program.

The mechanics to do this are available. There isn't a Board-established approved QRAM mechanism which recovers system supply costs on a cost passthrough basis from our customers.

This option - and this is important - will have sufficient volume, in our view, to enable the RNG market. We do not believe that would be the case with the opt-in/opt-out type scenarios that have also been proposed.

This is because the certainty of a specified demand from system customers will allow the RNG supply to develop with planning certainty. This certainty is required to develop the RNG market.

Individual customers continue to have options if they don't wish to participate

individually, despite their strong overall support for the program.

Looking at the program design as a whole, we believe it will accomplish the objective of stimulating the industry, enable the RNG supply business, and, most importantly, be implemented at an affordable cost that our customers support.

#### LDC Role in RNG Development

We believe the natural gas utilities are well suited to coordinate the development and management of the RNG industry in Ontario. This position was described in transcripts\_vol3\_Enbridge\_Union\_20120501, Page 74 lines 5 – 16 by the applicant as follows:

Will the third-party marketers and will a purely voluntary marketplace really be enabled over the short term?

And our suggestion is no, because it is very expensive to find those customers that would be willing to pay a premium. It is very difficult to contract for supply of gas when you don't know if you have the number of customers.

So the whole notion of being able to build solely on the basis of a voluntary marketplace, a market that does not exist today in this realm, seems unreasonable to us. So that is what we were getting at.

#### Usage of Biogas

We agree with the applicants that the usage of biomethane in the proposed RNG context is a more efficient than using biogas in electricity production. This point was made in the exchange between Mr. Brett and Mr. MacLean in transcripts\_vol2\_Union\_Enbridge\_20120430, Page 21 lines 8 – 19

MR. BRETT: What I really want you to confirm for me is that your view is that -- as offering this program, is that the conversion efficiency of this program is considerably greater than the conversion efficiency of the FIT program.

In other words, it is more energy-efficient?

MR. MACLEAN: Yes. That's our contention, provided there is no use for waste heat from the electricity option.

MR. BRETT: Right. Provided there is no co-generation.

MR. MACLEAN: Or useful -- useful use of the waste heat in any form.

## Term of Program

The applicants have proposed a five year term during which the proposed prices and conditions would be offered. Ag Energy affirms that there is a significant lead time to develop a project and that certainty for a necessary term is required to allow for project feasibility, connection assessment and project development to proceed forward. However, it may be advisable to review the prices and terms at certain intervals, for instance after two years, to ensure that the proposed offering is still appropriate, given changing market or economic conditions, ensuring possible revisions (i.e. equipment capital costs adjustments, interest rates, etc). It would be unfortunate to not learn from the valuable experience Ontarians have gained from the Solar and Wind FIT programs where prices paid for energy were not synchronized with the costs of developing projects leading to perceived inappropriate returns and the suspension of the program. Actions such as these lead to a questioning of investment and project adoption due to a lack of trust in program viability. Any revisions to the program as a result of periodic reviews could apply to new projects for which contracts have not yet been issued by the gas utilities.

In conclusion, Ag Energy Co-operative Ltd. and its membership support the concept of the RNG program, however we believe that there is more work to be done. We would appreciate the consideration of our voice as intervenors and would also be willing to participate moving forward, should the need arise.

Sincerely,

Rose Marie Gage

Chief Executive Officer,

Ag Energy Co-operative Ltd.