



EB-2011-0242
EB-2011-0283

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 prices for Enbridge Gas Distribution Inc.'s purchase of biomethane;

AND IN THE MATTER OF an application by Union Gas Limited for an Order or Orders approving and setting prices for Union Gas Limited's purchase of biomethane.

BEFORE: Paul Sommerville
Presiding Member

Cynthia Chaplin
Vice Chair

Marika Hare
Member

INTERIM DECISION AND ORDER
July 12, 2012

The Application

Enbridge Gas Distribution Inc. ("Enbridge") and Union Gas Limited ("Union Gas") each filed an application with the Ontario Energy Board under section 36 of the *Ontario Energy Board Act, 1998*, ("the Act") dated September 30, 2011, seeking an order or orders approving or fixing rates for the sale of natural gas by Enbridge and Union Gas

that include the cost consequences of the purchase of biomethane. Enbridge and Union Gas each propose to acquire biomethane as part of their respective supply portfolios for customers who purchase natural gas from the companies. The Board determined that it would combine the applications into a single proceeding.

Biomethane, also referred to as renewable natural gas, is processed from biogas and landfill gas through a cleaning process that allows it to be distributed to customers through the companies' existing pipelines. Biogas and landfill gas result from the decomposition of organic material in an oxygen-free environment, either as a result of a controlled process within an anaerobic digester or as a result of a natural process in a landfill site.

The companies have proposed to limit the volume of biomethane purchased to an annual cap of 3.3 petajoules (87 million m³) for Enbridge and 2.2 petajoules (58 million m³) for Union Gas. This quantity represents approximately 2% of system gas supply for the companies. The companies also requested approval of the pricing framework including the purchase of biomethane from Ontario producers at specified prices and for a 20-year term. The prices for biomethane produced through both landfill and anaerobic digester sources have differing price thresholds as set out in the table below.

Table 1
Proposed Biomethane Price Thresholds

Source	Annual Breakpoint ¹ (per site)	Under Breakpoint	Over Breakpoint
Landfill	150,000 GJ	\$13/GJ	\$6/GJ
Anaerobic Digester	50,000 GJ	\$17/GJ	\$11/GJ

The companies set the volume cap so that the estimated total bill impact on an annual basis for a standard residential customer would be approximately \$18 per year. They maintained that this rate impact would be acceptable based on the results of a customer survey they commissioned.

¹ Breakpoint means the point at which the rate of payment changes.

Interventions

The following parties were granted intervenor status in the proceeding:

- Ag Energy Co-operative Ltd. (“Ag Energy”)
- Biogas Association (formerly known as Agrienergy Producers Association of Ontario)
- Building Owners and Managers Association of Toronto (“BOMA Toronto”)
- Bullfrog Power Inc. (“Bullfrog Power”)
- Canadian Manufacturers & Exporters (“CME”)
- Consumers Council of Canada (“CCC”)
- Direct Energy Marketing Limited
- Energy Probe Research Foundation (“Energy Probe”)
- Federation of Rental Housing Providers of Ontario (“FRPO”)
- Green Energy Coalition (“GEC”)
- Guelph Hydro Inc.
- Just Energy LP
- the City of Kitchener
- London Property Management Association (“LPMA”)
- Pollution Probe
- School Energy Coalition (“SEC”)
- Shell Energy North America (Canada) Inc. (“Shell”)
- Summit Energy LP
- Toronto Region Conservation Authority (“TRCA”)
- TransCanada Pipelines Limited.
- Vulnerable Energy Consumers Coalition (“VECC”)

The Oral Hearing

An oral hearing was conducted, beginning on April 30, 2012, and concluding on May 4, 2012. Intervenor arguments were submitted in writing or presented orally on May 22, 2012, or filed in writing in advance. The companies’ reply arguments were heard on May 22, 2012.

Ag Energy, the Biogas Association, BOMA, GEC, Pollution Probe, and TRCA supported the applications and highlighted the potential environmental benefits of the proposed program, including emission reductions. Supporters of the applications asserted that

the ratepayer impact is capped and reasonable and that the proposal fits within the Board's statutory mandate to promote energy conservation and efficiency.

Bullfrog Power, CCC, CME, Direct Energy, Energy Probe, FRPO, LPMA, SEC, Shell, and VECC opposed the applications. These parties pointed to the high costs of the program and noted that, given the abundance of natural gas from other sources, biomethane is not required to meet customer need.

Some parties, like CCC, submitted that the Board should not re-configure the proposal because there is not enough evidence available to do so properly. Instead, they take the view that the applications should be rejected in their entirety.

Other parties proposed that if the Board were not inclined to reject the proposals, then significant modifications should be made, including further limiting the volume purchased, selecting only the most cost effective projects, conducting a mid-term review, applying different cost allocation, and using a "request for proposal" approach.

Board Findings

Introduction

In the Board's view the applications cannot be approved on the basis of the current evidentiary record. In using customer impact, derived from customer surveys, as the primary input for the hoped-for creation of a biomethane supply market, the applicants have neglected to provide sufficient evidence concerning some necessary elements of the program.

The Board is concerned with the lack of evidence in the following areas: evidence of the technical and operational considerations of potential developers in Ontario; a rigorous cost benefit analysis; evidence on like programs in North America and elsewhere; consideration of the potential involvement of gas marketers; and the appropriate size of this program and customer acceptance of the resulting bill impacts.

In light of this the Board has two options: to simply deny the applications as not having met the burden of proof on the one hand, or to give the applicants an opportunity to change or augment the evidentiary record with a view to developing a revised proposal. The Board has chosen the latter approach. The applicants, as part of this case and

without any further requirement for notice, will be afforded an opportunity to augment the evidentiary record and to present a revised proposal. The Board is taking this approach in light of the novel nature of this application. This approach will enable the applicants to refine their proposals taking into account the concerns that emerged during the course of the proceeding.

In doing so the Board wants to be as clear as possible in identifying the areas which it considers the evidence to be most deficient. Further, the Board wants to make it clear that in adopting this approach it has not in any manner made any finding that the purchase of biomethane by the applicants is appropriate or upon which terms it would be appropriate. The point is we simply do not have at this stage critical information which would allow the Board to make an informed decision on that question.

In providing this guidance the Board does not wish to limit or direct the applicants in the augmentation of the evidence which we are permitting with this interim decision. The nature of the evidence, its subject matter and design is strictly within the purview of the applicants. It is our hope that this guidance is helpful to the applicants and the intervenors as this application and the proposal evolves. It is also open to the applicants to withdraw the applications without prejudice.

Intervenors will have an opportunity to test whatever new evidence the applicants file. In fact, the Board encourages the applicants to engage the intervenors as effectively and completely as possible in the development of new evidence.

It is appropriate at this point to provide more guidance to the applicants respecting the kind of evidence that the Board regards as important for its decision-making process. The Board does so within the context of the findings with respect to the issues raised during the proceeding. The matter of jurisdiction is addressed first.

Jurisdiction

Enbridge submitted that the Board does not need a specific legislative mandate to approve the proposal. Enbridge argued that the Board has a broad mandate to consider the general public interest and that the benefits discussed in this proceeding fall within its purview. Enbridge submitted that a legislative underpinning exists for a proposal of this nature and referred to the *Green Energy Act, 2009*, the preamble to the

amended *Environmental Protection Act*, and the Western Climate Initiative (in addition to the provisions of the Act).

CME submitted that although the Board has the power under Section 36 of the Act to fix just and reasonable rates for the sale of gas, it does not have the power to fix prices for the sale and purchase price between Union Gas and Enbridge and prospective biomethane suppliers. Direct Energy submitted that the utilities have no legislative mandate to foster a renewable natural gas market in Ontario, that it is contrary to sections of the Act, namely section 2.1 and 2.2, and section 29, and that such approval would dramatically alter the competitive landscape of the natural gas market in Ontario.

Enbridge responded that the applicants have relied on Section 36 of the Act, which gives the Board the authority to approve the cost consequences of gas acquisition for the purposes of supply of gas to customers. Enbridge also discussed the issue of the Board's mandate and submitted that there are many elements of the gas-supply portfolio that cannot be directly found within the Act, such as peaking supplies or acquisition of conventional local production.

Direct Energy argued that the Board has already made a decision on this type of initiative in EB-2009-0172, which was Enbridge's application for Green Energy Initiatives. Direct Energy noted that in the EB-2009-0172 Decision, the Board found that Enbridge does not have a monopoly franchise for the production of renewable energy, that there is an alternative funding mechanism already established by the government for this type of activity, and that in the absence of a regulation passed by the government, generation assets should not be included in rate base. Direct Energy submitted that the same arguments that led the Board to determine that the cost consequences of Enbridge's Green Energy Initiatives should not be recovered through rate base also apply to the biomethane application.

Enbridge responded that in EB-2009-0172 the Board was deciding whether to approve the inclusion of particular assets in rate base, a proposal that the companies have not made in connection with the biomethane program.

The Board agrees with Enbridge that the current applications are different from the proposals contained in EB-2009-0172 as that application involved the inclusion of assets in regulated rate base. No such proposal is being made here.

The Board concludes that it does have the jurisdiction to approve the cost consequences of the purchase of biomethane by the gas distributors, in the same way it has the authority to approve the cost consequences of any other purchase of natural gas, or the purchase of any other service or material that is used in distribution service.

The Board has a broad mandate to set rates that are just and reasonable, and to set those rates using a mechanism that it finds most appropriate. If the Board determines that the costs of biomethane are reasonable and that its inclusion in the supply portfolio is appropriate, then it is open to the Board to approve the recovery of those costs through rates, even if they are in excess of market prices for natural gas. Having determined that the Board has the jurisdiction to approve recovery of biomethane costs, it does not necessarily follow that the Board should do so. Any approval would be dependent upon the strength of the evidence in support of the proposal. This is addressed further below.

Framework for Analysis: The Board's Long-Term Contract Policy

In seeking approval for the long-term costs of introducing biomethane into the gas distribution system, the Board considers these to be genuinely novel applications. However, while the economic and technical aspects of biomethane are different from other natural gas, the Board is of the view that the applications can be considered using the Board's existing policy as a general framework for analysis.

The Board addressed the issue of pre-approval of the cost consequences of long-term contracts in its *Report of the Board (Draft Filing Guidelines for the Pre-Approval of Long-Term Natural Gas Supply and/or Upstream Transportation Contracts)*, EB-2008-0280 ("Draft Filing Guidelines"). In that Report the Board stated²:

The Board agrees with stakeholders that long-term supply contracts may be justified in limited circumstances such as supporting the development of new natural gas infrastructure.

The Board further stated:

² Draft Filing Guidelines issued on February 11, 2009, page 4.

The Board also agrees with stakeholders that the process should allow a utility to apply to the Board on a case-by-case basis to pre-approve the cost implications of the long-term contracts (as per section 36(2) of the Ontario Energy Board Act, 1988). The utility is to file its application with the Board either prior to contract execution, or after execution (with a condition precedent regarding Board approval), but before it incurs costs under the long-term contracts. The Board will approve the costs associated with these contracts, not the contracts themselves.³

To support this policy, the Board established a framework to guide the application process through Final Filing Guidelines.⁴ Applications are expected to address the following areas:

- Needs, Costs and Benefits
- Contract Diversity (contract parameters and portfolio assessment)
- Risk Assessment
- Other Considerations (affiliate relationships and impacts on retail competition)

The companies were reluctant to consider the applications in the context of this policy. However, the Board concludes that the policy is suited to providing a general and informative framework in which to consider these applications for several reasons. First, the applications are for the recovery of the cost consequences of 20-year contracts with new suppliers. Second, the applicants maintain that biomethane producers require long-term contracts with fixed prices to support the development of the new infrastructure, namely the large scale conversion of biogas to pipeline quality biomethane. Third, the companies are not prepared to enter into these contracts without certainty of cost recovery. It is therefore useful to assess the proposals under the Board's policy and against the areas identified in the Board's Filing Guidelines.

Need, Costs and Benefits

The Filing Guidelines call for the following:

³ Draft Filing Guidelines issued on February 11, 2009, page 4.

⁴ Final Filing Guidelines issued on April 23, 2009.

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- *A description of the proposed project that includes need, costs, benefits (such as this project improves the security of supply and the diversity of supply sources) and timelines*
 - *An assessment of the landed costs (supply costs + transportation cost including fuel costs) for the newly contracted capacity and/or natural gas supply compared to the landed costs of the possible alternatives.*

The Board will address need, costs, and benefits separately.

Need

The Applicants were candid in their acknowledgement that the introduction of biomethane gas into their respective distribution systems is not a significant element in their supply planning. It is clear that certainly under current circumstances, neither applicant can demonstrate “need” in the conventional sense. However, the applicants did seek to establish that the development of this form of supply met needs other than strict security of supply requirements.

They justified their proposals in terms of the environmental benefits provided by the use of biomethane sources. These benefits take two main forms: reduced greenhouse gas emissions through anaerobic digestion, in agricultural settings primarily, and greater energy efficiency through the collection and use of biomethane from landfill sites rather than the flaring of landfill gas. The applicants maintained that these benefits were consistent with established government policy goals in Ontario, and that natural gas distribution should reflect the societal need for those benefits through the introduction of biomethane into their respective systems.

As a result, the analysis of these benefits against the cost of the biomethane is an important factor in determining whether the program is justified.

Costs

The companies identified a variety of project types and proposed a set of prices that are based on a series of cost estimates developed by an external consultant with expertise in the area. These proposed prices when compared with the current level of natural gas prices in the market result in a substantial premium for this new source of supply.

The companies then derived the total volume they propose to purchase based on the resulting bill impact for customers. Using survey data, the applicants concluded that the bill impact for residential consumers should be no greater than 2% per year. On that basis, the proposed maximum volumes, namely 3.3 petajoules (87 million m³) for Enbridge and 2.2 petajoules (58 million m³) for Union Gas were derived.

The total cost premium is estimated to be \$56 million per year if the program is fully subscribed at a blended price. This premium will decline if natural gas prices rise over time, but the premium will increase if natural gas prices decline further. The impact for residential customers is estimated to be \$18 per year, and the impact for commercial customers is estimated to vary from approximately \$505 per year for Rate M2 customers to \$16,000 per year for Rate M4 customers.

Two aspects of the costs are important: the proposed supply pricing structure and resulting ratepayer impact. The Board concludes there are shortcomings in the evidence in both areas.

Supply Pricing Structure

Having derived generic prices for various categories of biomethane projects, the applicants concluded that these prices would be sufficient to attract a variety of biomethane producers to the program. However, there was limited evidence respecting actual biogas producers who may be prime candidates for the biomethane program.

In the Board's view it is only through an assessment of the genuine viability of different types of projects and a thoughtful analysis of the optimal mix of projects that the Board can determine whether the proposals and the costs consequences, are reasonable.

This analysis would include a quantification of the environmental benefits and an assessment of the actual potential for projects of different types. It may well be that specific examples from amongst the existing candidates provide the best means of conducting this analysis. It would be detrimental in the long run if the Board were to approve the cost consequences of a biomethane program which did not have a reasonable prospect for success.

Ratepayer Impact

Many intervenors argued that no premium in excess of current market prices would be appropriate. The Board does not agree. While the Board expects that the purchase of natural gas will be conducted in the competitive market, there may well be other valid considerations when developing the gas supply portfolio which may result in other, higher prices being paid. A rigorous cost/benefit analysis would be necessary in these circumstances. A rigorous cost/benefit analysis is largely missing from the applications; this is discussed further below.

Even where it is potentially appropriate for a premium to be paid and recovered from ratepayers, it is also important to determine what level of customer impact is reasonable in the circumstances.

The companies argue that the forecast cost premium (about \$18/year for a residential customer) is supported by customers. They point to the customer survey as evidence of this support. Most intervenors were quite critical of the survey. Some suggested that the questions were misleading; some suggested that if the questions were worded differently the results might have been quite different. Most argued that no significant conclusions could be drawn from the survey.

The Board finds that limited reliance can be placed on the survey and the results of the survey are not determinative of acceptable ratepayer impacts. Surveys are a snapshot in time and respondents are of necessity provided with limited information. A survey, while useful, cannot be said to represent the views of customers based on a comprehensive analysis of the proposal.

The Board does, however, find that the survey results support a conclusion that consumers are willing to pay a modest premium for the environmental benefits of including biomethane within the overall gas supply. Respondents were asked if they supported the introduction of biomethane at different levels of total bill impact, and the survey results indicated support where the bill impact was modest. However, the survey does not capture customer expectations as to the resulting environmental benefits. It is reasonable to assume that customers would expect to realize quantifiable benefits for the premium and that the level of support for any premium might vary directly with the level of environmental benefits.

The Board therefore concludes that the \$18 threshold of residential customer acceptance should be treated with caution, and indeed, any assessment of the acceptable level of customer impact must be compared to the level of benefits associated. The Board discusses this issue of ratepayer impact below in the section on Risk Assessment.

Benefits

The companies identified a number of benefits:

- enabling the biomethane market
- local production and local economic benefits
- waste reduction
- efficiency benefits (compared to electricity generation)
- greenhouse gas emission reductions (in keeping with government policy)

We will address each in turn.

Enabling the Biomethane Market

The applicants identified the key objective of the biomethane program as enabling the development of the biomethane market; a market which they envision may eventually compete with market-priced natural gas. There was some support for this objective. GEC likened the gas utilities' role to facilitating market transformation, in a manner similar to natural gas demand side management. However, most intervenors argued that others, in particular government, are better placed to enable or support the biomethane industry and that it is inappropriate to have ratepayers subsidize this activity.

CME and LPMA each argued that there is evidence of an emerging market for biogas and biomethane already. LPMA further submitted that the market's development should be left to market forces and not be artificially stimulated. Shell argued that rather than fostering future competitive trade in biogas and environmental attributes, there is the potential with 20-year contracts for the programs to stifle future market evolution by removing this local supply from the mix of alternatives available to large commercial and industrial consumers, as well as marketers. Enbridge responded that the program would not take biomethane producers out of the competitive market, because in Ontario there is no biomethane production market to begin with.

In the Board's view the applicants established the wrong goal for their programs. Their purpose in bringing the applications was expressly to create or enable a market for biomethane in Ontario. With respect, that is an objective which is beyond the scope of the distributor's role. It is appropriate for the distributors to consider the conditions and pricing necessary to accept biomethane into their respective distribution systems, but it is not appropriate for them to use system gas customers as a means of subsidizing a variety of biomethane producers in the hope of developing a viable biomethane supply market. In addition, the companies provided no evidence where such a program has been successful in stimulating market development, and therefore the achievement of this benefit is almost entirely speculative in any event. The Board concludes that this benefit should have no weight in the assessment of the program

Much of the design of the program was rooted in the applicants' objective of trying to create a market. The plan to purchase from a variety of producers – large and small – landfill and agricultural – is a key example. This approach undermines the overall cost effectiveness of the program, as discussed further below.

None of this is to say that it is entirely inappropriate for the distributors to purchase biomethane; rather this finding is specific to the stated objective and claimed benefit of enabling the biomethane market through compulsory ratepayer subsidies.

Local Production and Local Economic Benefits

As a local supply biomethane offers some security benefits compared with natural gas that must be transported long distances. The companies presented evidence by Dr. Abboud who estimated the potential biomethane supply at up to 6% of current Ontario demand in the short-term and up to 18% of current Ontario demand in the long-term.

However, it is apparent to the Board that the amount to be purchased under the biomethane program is a small fraction of this potential and therefore the direct value of this benefit is essentially *de minimis*.

The companies also pointed to the local economic benefits of these projects. While this might be a consideration if the supply was cost competitive with natural gas, the Board concludes that little value should be attached to this benefit. It is not the role of the gas distributors to stimulate the local economy through subsidies from their ratepayers. As a result, the Board attaches no weight to this benefit.

Waste Reduction

The applicants identified waste reduction benefits, particularly in relation to biomethane from anaerobic digesters. Ag Energy submitted that the potential environmental benefits of using biomethane from farm and food-based biogas systems is a strong driver in support of the application. Ag Energy noted that the resulting benefits included reductions in emissions, odour, pathogens, and land filling, as well as reduced waste management costs for the food sector, recycling of nutrients and carbon to the land, local fuel production, and local synergies. TRCA identified similar benefits.

The Board finds that little weight can be attached to these benefits. While they may be admirable goals, the Board can find no basis for sanctioning ratepayer subsidies to accomplish them. These goals do not flow from government energy (or conservation) policy and are therefore too distant from the utilities' core responsibilities to be considered.

Efficiency Benefits (compared to electricity generation)

The applicants maintained that injecting biomethane into the gas distribution system is more efficient than using biogas for purposes of electricity generation, unless the electricity generator has a host for the heat produced. The Biogas Association cited this benefit in its support for the program.

While this is a potential energy efficiency benefit, SEC argued that this could put the biomethane program in competition with the OPA's FIT program. There was limited evidence as to the split among FIT eligible projects, between those with a user for the heat generated and those without. There was also limited evidence as to the potential for these types of projects to be attracted away from the FIT program.

The Board concludes that no particular benefit should be associated with this attribute.

Greenhouse Gas Emission Reductions (in keeping with government policy)

The primary environmental benefits of biomethane are greenhouse gas emission ("GHG") reductions and substitution benefits where biomethane is produced from landfill (and subsequently used) rather than flared.

GEC supported the companies' proposed program primarily due to the potential GHG reduction benefits. GEC submitted that the GHG reductions that a successful program could attain are significant and that if the programs were to result in no more biomethane beyond the 5.5 PJ volume cap, it would accomplish 8.1% of Ontario's 2020 GHG reduction goal. GEC also argued that the value of the program's accumulation of carbon credits will enable the eventual retirement of the credits and thereby pass the savings to consumers.

The Biogas Association argued that increased energy conservation and increased production of renewable energy are part of the broad public interest in Ontario, as reflected in the Green Energy Act.

LPMA submitted that the proposals should be rejected, but that if and when a carbon tax is introduced in Ontario, or some form of monetization of environmental impacts and attributes is possible, the Board may wish to review the economics, costs and benefits of a proposal to assist the development of the biomethane industry.

Board staff suggested that the Board should be cautious when it considers public interest or program benefits that do not relate specifically to the Board's objectives. In staff's view, those benefits that squarely reside in the Board's objectives should be given much greater weight than those that do not. Board staff noted that the efficiency and conservation benefits of the program do fall within a specific objective of the Board, but, as also noted by CCC, the endorsement of energy conservation and efficiency is limited to those that are tied to an actual policy of the government. Further, Board staff argued that even when these activities can be tied to a government policy, consideration for consumers' economic circumstances still needs to be undertaken.

Enbridge responded that the public interest mandate must be looked at through the lens of the objectives in the Act. Enbridge argued that there is a broad range of public interest considerations that the Board can take into account in a particular case, and ultimately, the weight to be given to those considerations depends on the circumstances of each case. Enbridge submitted that there should not be an attempt to put a pre-defined construct around how to weigh those factors.

CCC also argued that the proposed program is inconsistent with the Board's objective to protect the interests of consumers with respect to prices, and with the Board's obligation with respect to education of consumers.

SEC argued that the Board should be guided by the objectives to facilitate competition in the sale of gas, to protect the interests of consumers with respect to prices and the reliability and quality of gas services, and to promote energy conservation and energy efficiency in accordance with the policies of the government of Ontario, including having regard to consumers' economic circumstances. SEC noted that a missing objective, one that is found for electricity, provides even more insight for the Board. SEC argued that because the Legislature did not vest the Board with an objective to promote the generation of natural gas from renewable energy sources, like it did with electricity, the proposal put forth by the companies does not protect the interests of natural gas consumers with respect to price, but rather harms customers with respect to price.

VECC submitted that the applications do not facilitate competition in the sale of gas or protect the interests of consumers with respect to prices and the reliability and quality of gas service.

Enbridge responded that the intent was to design a program that takes into account and protects the interests of consumers with respect to prices. Enbridge noted the proposed volume cap, which is intended to limit prices to a reasonable and appropriate level, and the Ipsos Reid survey, which provides an understanding of a level of price impact acceptable to consumers.

With respect to promoting energy conservation and energy efficiency and having regard to the consumers' economic circumstances, Enbridge noted that it relied on submissions made by GEC in relation to this objective. Enbridge submitted that "to promote" is a key phrase and should guide the Board to do something a more active than if the objective were to have said "to facilitate." Enbridge further submitted that in promoting energy conservation and energy efficiency, the Legislature has not determined that the Board will only allow things that are cost-free. Enbridge submitted that the companies' position, after having taken regard of the consumers' own view of their economic circumstances through a survey, is that they have brought forward a proposal that is structured around a reasonable level of costs on a per-customer basis.

The Board concludes that it must ensure that the proposals do not have a material adverse impact on the overall health of the competitive retail gas market in Ontario. This issue is addressed in detail below under “Other Considerations”.

As indicated above, some parties have argued that it is contrary to the Board’s objectives to approve any costs which are above the market price of natural gas. The Board does not agree. The Board finds that a gas supply portfolio which includes an amount at a premium price but which has significant environmental benefits may simultaneously achieve the Board’s objectives related to consumer protection and energy conservation and efficiency. Programs which reduce GHG emissions and enhance energy efficiency are arguably aligned with the established policies of the Ontario government. The interests of consumers are protected, and their economic circumstances are taken into account, by ensuring that the cost impact is reasonable and in keeping with the environmental benefits achieved.

Based on the survey results, the Board has concluded that consumers are willing to bear some level of increased costs for associated environmental benefits. However, in order to justify those increased costs, those benefits must be substantive and quantified. The Board must consider whether the level of environmental benefits is sufficient to justify the cost premium. In this respect, the evidence was not sufficient.

The companies propose to contract with a variety of producers with varying levels of environmental benefits and at varying prices. The companies declined to quantify the environmental benefits with any precision because they did not know the mix of projects. They also disagreed that the most cost effective environmental benefits should be preferred. In the companies’ view, the program is designed to enable an industry and therefore should have a mix of projects. The Board has concluded that it is not an appropriate role for a distributor to seek to enable a market by subsidizing the market with ratepayer contributions, and the prospect for enabling the industry is speculative in any event, and therefore cannot form the basis for the biomethane program. As a result, to the extent it is appropriate for ratepayers to pay a premium for biomethane, it is imperative that the associated benefits are quantified and optimized to the extent possible. It is unlikely that it would be appropriate for ratepayers to pay a premium for a supply with significantly lower benefits compared to the alternatives.

The Board must be cautious about approving costs which will have the effect of raising customer bills. It is important that the analysis which supports the purchase of biomethane at premium prices be robust and that the impact be fully understood. In this way customers can understand the basis of the decision and the benefits and costs will be appropriately transparent. The current record is deficient in this respect.

The Board understands that there are difficulties in developing a rigorous analysis in this area. For example, there is no market price for carbon in Ontario and although customers will get the value of the environmental attributes, the value of those attributes is highly uncertain.

It appears from the evidence that large landfills can produce biomethane relatively more economically than anaerobic digesters, but the GHG reduction benefits are substantially less because large landfills are already required to flare their methane. However, there are benefits associated with using this methane rather than flaring it. This was identified as a substitution benefit in the companies' analysis.

Pollution Probe proposed that the projects with the lower cost for GHG reductions be prioritized. The Board agrees this proposal has merit. Pollution Probe further proposed that the highest cost projects be excluded and that preference be given to the low cost projects if capacity is constrained or if the program is approaching the volume cap. Again, the Board believes this approach has merit.

The Board emphasizes that it is for the companies to develop a revised proposal, but it will be important to demonstrate that ratepayers are generally getting the highest possible benefits per dollar of premium.

Contract Diversity

The Filing Guidelines call for the following:

- *A description of all the relevant contract parameters such as transportation/supply provider, contract length, conditions of service, price, volume, and receipt and delivery points.*
- *An assessment on how the contract fits into the applicant's overall transportation and natural gas supply portfolio in terms of contract length, volume and services.*

The companies provided standard contracts of the form they propose to use with biomethane producers. The term of 20 years was supported by the expected life of the

associated equipment. The proposed volumes have been derived in relation to controlling the total bill impact on customers. The proposal has been constructed to accommodate different sized projects (small and large) and different biomethane sources (landfill and anaerobic digesters), while limiting the cost impact on customers.

The companies claimed they reviewed other jurisdictions to the extent they were able, but they provided very limited evidence respecting the development of biomethane programs in other jurisdictions, other than for the Fortis program in British Columbia which is referenced below. It would clearly be of benefit to the Board to have detailed information about how other jurisdictions, and in particular the neighbouring jurisdictions of New York, Pennsylvania and Ohio, approached the introduction of biomethane into conventional supply. Was this accomplished through market models, or was government or some other form of subsidy a key factor? Were sectors of the biogas producers ruled in or ruled out in developing biomethane supply? How were retailers accommodated within these programs? How was pricing arrived at? All of these issues and more will be of interest to the Board in trying to determine the advisability of a consumer funded biomethane program.

In the course of the proceeding the Board also heard evidence respecting circumstances where some form of biomethane supply had been accomplished in Ontario. Specifically, reference was made to a City of Hamilton program which transformed biogas produced by the municipality into biomethane for use within the municipality's buildings or operations. It would be useful for the Board to have more information about this and like circumstances in other locations in Ontario. It would also be appropriate for the companies to consider facilitating other projects where the proponent injects biomethane into the system for its own use. This would facilitate the environmental benefits with the premium supply cost being borne directly by the proponent.

It is also important to note that there is currently a government of Ontario sponsored biogas program, which may attract biogas producers to the exclusion of a viable biomethane program. This issue needs to be more effectively addressed.

A number of intervenors proposed changes to the program. GEC offered several suggestions, including a hybrid RFP approach after an initial period of industry awareness and a mid-term review on price, scope of the projects, and rule adjustments

in order to ensure the program is performing in the manner it was intended and to help protect the interests of consumers.

In order to maximize cost effectiveness, Pollution Probe proposed excluding free riders, prioritizing lowest cost GHG reductions, reporting on GHG reductions, a mid-program report and review, and to use ratepayer impact as a cap, not volume of renewable gas purchased. Pollution Probe also proposed that GHG reductions for each project be reported for purposes of measuring the success of the program and considering changes in approach.

LPMA submitted that if the Board is to approve the applications, an RFP process should be held to ensure the least expensive biomethane is purchased first. LPMA argued that the companies have provided no compelling evidence to remove an RFP process in the determination of the costs that are to be paid for by ratepayers. In regards to the length of the contracts, LPMA noted that contracts at this length, at prices many times higher than the current market price for natural gas, place the risk of higher than market prices on ratepayers for the proposed 20 year term of the contracts. LPMA submitted that as part of the RFP process, the length of the contract should be considered as not all potential producers may require, or want, a 20 year contract.

In response to the proposal of an RFP process, Enbridge submitted that there is not a well-established existing biomethane production industry in Ontario. Even if there were an existing industry, Enbridge submitted that an RFP response can be very speculative. Enbridge argued that there is a significant difference dealing with an existing business sector because there is an established knowledge base to draw upon for the purpose of an RFP response. Without that knowledge base, Enbridge submitted the RFP process would likely not produce the desired results. Other than the matter of an RFP, the companies expressed a willingness to consider the proposed modifications.

The Board finds merit in many of the proposed modifications. While it is for the applicants to consider and prepare a revised biomethane program, the Board would expect to see many of these suggestions addressed directly. For example, the Board has already addressed the importance of maximizing the cost effectiveness of the environmental benefits. Importantly, the companies have acknowledged that a mid-period review would be appropriate and the Board agrees. Such an approach might result in a lowering of the required price – or the introduction of an auction or RFP

process – thereby mitigating the impact on customers. Another outcome might be the conclusion that no further action should be taken in light of market circumstances.

Risk Assessment

The Filing Guidelines call for the following:

- *Identification of all the risks (such as forecasting risks, construction and operational risks, commercial risks and regulatory risks) and plans on how these risks are to be minimized and allocated between ratepayers, parties to the contract and/or the applicant's shareholders.*

The companies addressed the issue of gas quality and no substantial concerns were raised in this area. The Board concludes that reasonable measures have been put in place to ensure appropriate gas quality from this new supply.

The proposals are structured so that the biomethane producers bear all the costs of connection to the distribution system and the associated operating and maintenance costs. In this way, the risk for other ratepayers is limited to the premium attached to the supply itself. The utilities and their shareholders bear no risk. The utilities earn no margin on the premium price, but they do earn incremental revenues through the connections to the system and the ongoing charges for those facilities. There are incremental revenues through additional charges for gas in inventory which are allocated to all customers (not just system supply).

The risk to ratepayers is related to the premium paid for the supply. Although the proposals have been structured to limit the incremental cost to about \$18 per year, it is possible that this incremental cost could rise. This would happen if the market price for gas declines over time or if the number of system supply customers declined. The impact is also affected by the mix of supply sources and volumes.

LPMA submitted that if approved, the Board should reduce the volume caps to 1.0 PJs for Union Gas and 1.5 PJs for Enbridge. VECC argued that the proposed maximum volume caps should be reduced to 25 percent.

While the Board has concluded that there is some level of customer support for a premium priced product, the Board finds that the target of \$18 per year may be excessive. In addition, the impacts for commercial customers fall within a wider range.

The Board concludes that based on the uncertainty around uptake, uncertainty as to natural gas prices, and the need to maintain control of ratepayer impacts, a more modest target may be advisable for the initial period. Depending upon uptake characteristics, natural gas prices, government policy and customer attitudes, additional purchases might be warranted after a mid-period review.

Other Considerations

The Filing Guidelines call for the following:

- *A description of the relationship and any other conditions, rights or obligations between the parties to the contract and the applicant's parent company and/or affiliates.*
- *An assessment of retail competition impacts and potential impacts on existing transportation pipeline facilities in the market (in terms of Ontario customers).*

Affiliate Issues

The companies have confirmed that they have no other relationships with potential biomethane producers and that there would be no relationship between any of the contracted biomethane producers and the companies' parents or affiliates. In light of these assurances, no concerns were raised. The Board concludes that this aspect of the proposals is appropriate.

Retail Competition Impacts

The companies propose to allocate the costs to all system gas customers. As a result, customers who purchase their gas supply through gas marketers would not bear any of the costs. In this way, the companies also took the position that they were not having an adverse impact on the competitive supply market.

LPMA argued that the issue of who should pay the premium comes down to three variables: fairness, who benefits from the production, and customer choice. LPMA argued that it is not fair to allocate the costs to only some customers when the benefits will be shared by more than system gas customers. Further, LPMA noted that the

utilities themselves will benefit through branding and in the value of a “long-term defensive strategy” to ensure the continued growth of the companies, but at no cost to themselves. LPMA offered an alternative three part process if the Board approves of the utilities purchasing some level of biomethane that results in an increase in costs:

- Step 1 – any biomethane volumes purchased by Union and Enbridge should be available for purchase by marketers.
- Step 2 – A voluntary opt-in provision for system gas customers, similar to that approved by the British Columbia Utilities Commission for Terasen Gas Inc., now ForstisBC.
- Step 3 – that the premium paid for biomethane will be reduced by the amount sold to marketers (Step 1) and the amount paid by system gas customers that opt-in to have a portion of their gas supplied from biomethane (Step 2). The remainder of the premium should be allocated based on the methodology used to allocated compressor fuel costs to customers across all rate classes.

Similarly, VECC submitted that the program should be voluntary and there should be a mechanism for marketers to buy volumes. If there are volumes left over, those costs should be distributed across the system.

The companies objected to a voluntary program, for three primary reasons: they do not have the marketing expertise to pursue such an approach; there is too much uncertainty around the level of take up to underpin the purchase commitments; and it would place them in direct competition with gas marketers with similar programs. The Board concludes that the voluntary approach would be inappropriate. Such an approach would effectively place the utilities in the position of competing directly with marketers, as opposed to their current role, which is essentially that of default supplier. The Board concludes that this would be an inappropriate distortion to the competitive market.

Some intervenors argued that requiring all system gas customers to pay for the biomethane removed customers’ right to choose. The Board does not agree. The utilities purchase a portfolio of supplies for their customers. Utility supply customers do not have the ability to opt-out of any individual source of supply (for example, shale gas, or gas extracted from environmentally sensitive areas). Utility customers do however have the ability to purchase their supplies in the competitive market. The competitive gas market is well established in Ontario and provides an effective alternative for customers who are dissatisfied with the utility’s gas portfolio for whatever reason.

Some intervenors argued that the premium should be allocated to all customers, both system supply and those on direct purchase. One mechanism would be for the companies to purchase the biomethane as “own use gas”, the costs of which are allocated to all customers. The Board concludes that this approach is likely not appropriate as it allocates supply costs to customers who have decided to purchase their gas through marketers.

The Board concludes that to the extent the costs are borne by system gas customers, they should be borne by all system gas customers and the distributors themselves should not run voluntary programs. However, there remains the role of gas marketers in relation to the utilities’ biomethane program.

It is the Board's view that the role of retailers in the biomethane program has not been effectively addressed. Marketers argued that the proposed architecture for the biomethane program could have the effect of limiting the opportunities for gas retailers to offer focused biomethane packages to their customers.

Bullfrog Power noted that it is in principle supportive of the proposed program. However, it submitted that the program must be reconfigured to address three issues: the failure to adequately consider the program’s impacts on the voluntary market; the possible negative impacts of a program that is much larger in scale than the only available proxy in Canada, that being the Fortis B.C. program; and, that the program fails to consider or adopt measures that would actually spur on or nurture development of a voluntary market. Bullfrog Power offered several suggestions for the Board to consider if the program were to be approved, including a small RFP process, pricing recommendations, rules concerning priority of who is eligible for distribution or transmission supply between the voluntary and mandatory market, and development of a comprehensive communications strategy.

Enbridge responded that the inclusion of a mechanism to allow for gas marketers to participate would be one that would keep system gas customer whole in respect of the overall costs. Enbridge noted that if the Board considered it appropriate to allow such a mechanism for the gas marketer community to participate and offer renewable natural gas as a voluntary option, the companies would be open to this adjustment to the proposed program. The Board concludes this has merit and should be considered

further along with a more comprehensive assessment of impacts on the competitive supply market. The applicants' supplementary evidence should address these aspects.

Cost Awards

Some intervenors argued that the costs for this proceeding should be borne by the shareholder. The Board notes that this was a thoughtful and innovative application and was important in expanding all participants' knowledge of the possibility of introducing biomethane into the system gas portfolio. As a result, the costs of this proceeding will be treated in the same manner as any other application by Enbridge or Union.

The Board will make provision for cost awards at this time.

THE BOARD ORDERS THAT:

1. Union Gas and Enbridge may file supplemental evidence to address the issues raised in this decision. Any additional evidence must be filed with the Board, and sent to all parties, by October 31, 2012.
2. Intervenors eligible for an award of costs shall file their cost submissions in accordance with the Practice Direction on Cost Awards with the Board Secretary and with Enbridge and Union Gas within **15 days** of the date of this Decision and Order.
3. Enbridge and Union Gas may make submissions regarding the cost claims within **30 days** of this Decision and Order.
4. Intervenors may reply within **45 days** of this Decision and Order. A decision and order on cost awards and the Board's own costs will be issued in due course.

All filings to the Board must quote file number EB-2011-0242/EB-2011-0283, be made through the Board's web portal at www.errr.ontarioenergyboard.ca and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at

www.ontarioenergyboard.ca. If the web portal is not available parties may e-mail their document to BoardSec@ontarioenergyboard.ca. Those who do not have internet access are required to submit all filings on a CD in PDF format, along with two paper copies. Those who do not have computer access are required to file two copies.

DATED at Toronto, July 12, 2012

ONTARIO ENERGY BOARD

Original Signed By

Kirsten Walli
Board Secretary

Appendix A

EB-2011-0242

EB-2012-0283

Witness Panels

Witness Panels

Panel 1: Project Overview

Mr. James Grant, Enbridge Gas Distribution Inc.

Mr. Trevor Maclean, Enbridge Gas Distribution Inc.

Mr. Bryan Goulden, Union Gas Limited

Ms. Barbara Gardiner, Union Gas Limited

Ms. Sandra Guiry, Ipsos Reid

Panel 2: Technical

Mr. Owen Schneider, Enbridge Gas Distribution Inc.

Mr. Bryan Goulden, Union Gas Limited

Mr. Ed Seaward, Union Gas Limited

Dr. Salim Abboud, Alberta Research Council

Mr. Eric Camirand, Electrigaz Technologies Inc.

Panel 3: Cost Consequences

Ms. Jackie Collier, Enbridge Gas Distribution Inc.

Mr. Donald Small, Enbridge Gas Distribution Inc.

Ms. Mary Evers, Union Gas Limited

Mr. Greg Tetreault, Union Gas Limited