

## INTRODUCTION

In its August 29<sup>th</sup> application, Enbridge Gas Inc. (EGI) requested Leave To Construct (LTC) for approximately 6 km of NPS 4 XHP steel natural gas pipeline from the Ridge Landfill to the Chatham East Line at the Blenheim North Gate Station. The purpose of the pipeline is to provide pipeline access of landfill generated gas to the EGI system allowing the gas to be sold.

Renewable Natural Gas (RNG) provides an opportunity to reduce greenhouse gas impacts on climate change by combusting methane which, in many scenarios, simply moves to atmosphere. To enable the environmental and economic conditions for such a change, RNG producers need to find opportunity to move the methane to customers who are willing to use the gas as a substitute for traditional fossil-generated methane.

As such, it is understandable that landfill sites, such as Ridge, would seek access to EGI's network of pipes that distributes methane to plentiful customers who use the methane in their homes, institutions, and businesses. With the Ontario Government and Energy Board focused on enabling positive steps to contribute to meeting climate change goals, the process of access to the EGI system becomes very important. As the monopoly distributor for most of Ontario and operator of physical market hub at Dawn, EGI is in unique position to facilitate opportunities for an RNG market. It is in that vein that the Federation of Rental-housing Providers of Ontario (FRPO) contributes its concerns and these submissions.

FRPO has reviewed the application and asked a number of interrogatories which generated little information on the project. FRPO respectfully submits that there is little evidence on the record for the Board to approve the Leave to Construct in the public interest, in spite of the fact that the proponent has committed to pay for the entire cost of the project. In our view, EGI has not provided evidence that demonstrates that its approach to this project facilitates access of RNG producers.

### ISSUE 1: NEED – RNG PRODUCERS BENEFIT FROM ACCESS TO THE EGI SYSTEM

Given the nature of the pipeline, the definition of need is different from traditional LTC projects. Fundamentally, the most economical channel for market access of a commodity is an established system with many customers. The network of natural gas pipes that distributes the commodity across Ontario provide just such a system. Non-discriminatory access of RNG providers to the EGI system would be beneficial to the development of an RNG market. This type of access is created by optimal choice of means of access under fair and transparent conditions.

The monopoly regulated service for access is currently provided under the M13 rate in Union Gas Rate Zone. We understand the costs and conditions in the rate schedule are

rate matters which will be an issue in the EGI 2024 Rebasing Proceeding (EB-2022-0200). However, as we will outline below, some aspects of that rate schedule could inhibit the economics of a project from the producer's perspective.

## ISSUE 2: ALTERNATIVES – LIMITED EVIDENCE ON ASSESSMENTS

The standard issues list defines this facet of review: ***“Has the applicant demonstrated that the identified need is best addressed by the proposed project, having adequately considered all viable alternatives”***

In our respectful submission, EGI has failed to demonstrate the proposed project best addresses the need for the following reasons:

### EGI Did Not Provide Evidence of Its Assessment Even When Requested

In our interrogatory FRPO.1, we sought to understand the alternatives that were evaluated. EGI's answers provided little evidence on the assessment of alternatives beyond that nearby pipelines “were considered.” The company's responses or lack thereof are disconcerting.

- **The requested map was filed with a request for confidentiality**

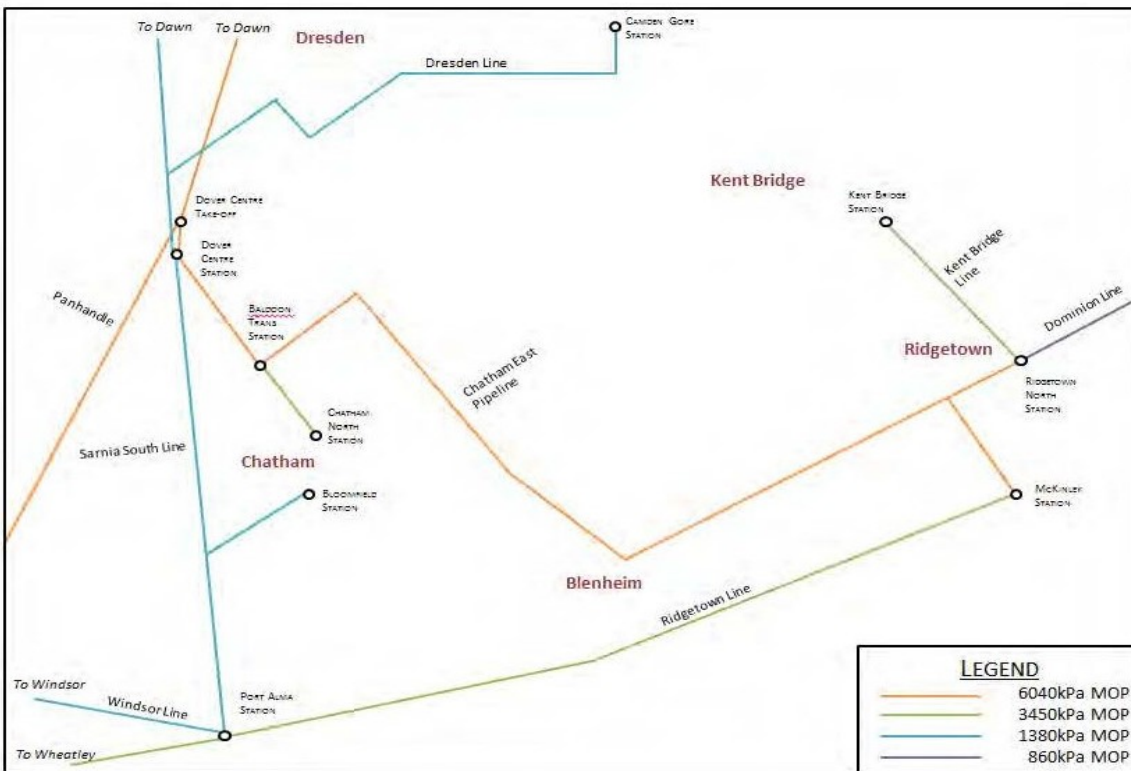
EGI provided, “This is because the map contains specific locations of Company critical infrastructure that poses both a safety and a security risk.” This rationale frankly surprised us as pipeline network maps have been provided by the company on the public record in past facilities applications either in evidence or in response to discovery. Upon receiving a copy of the map after filing our Confidentiality Undertaking, we found that the map was not only very limited in detail but also added terrain to the background which was unnecessary and potentially the source of EGI's concerns over risk.

FRPO had sought the map in conjunction with our questions on alternatives assessed. We believed that the location of pipes in proximity to the landfill would orient ourselves and the Board in understanding the alternatives evaluated. Having received the Board's decision to accept EGI's request for confidentiality, we sought another map filed by EGI recently to provide a frame of reference for the Board in reading our submissions. We found such a map,<sup>1</sup> similar to what we sought in our interrogatory, in a recent LTC application. We have included the map below, embedded in our submissions, to assist the reader in our hearing our submissions in context.

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<sup>1</sup> EB-2018-0188 UNION\_APPL\_Chatham-KentRuralProject\_20180605, Schedule 3

Map of Existing Chatham-Kent Pipeline Network  
Chatham-Kent Rural Project



Since the map is not to scale, we did not attempt to situate the Ridge Landfill on the map. However, transposing its location from the confidential map, and with Google Maps as a reference, the Landfill would be approximately just left of the “B” in Blenheim. We used other tools which we will detail later to approximate distances.

- **EGI did not provide the requested analysis of other alternatives**

FRPO requested that EGI provide its analysis of alternatives including pressure, flow, sizing and cost in that same interrogatory. EGI provided that “all **distribution** pipelines” (emphasis added) were considered but did not have “sufficient demand to meet Waste Connections’ injection volume.” FRPO accepts that while Blenheim may not have sufficient demand, we requested EGI provide their analysis not a statement that they “considered”. We are not sure if the insertion of the word distribution specifies a limitation to their answer, but we sought demonstration of their assessment.

- **Ridgetown Line may be a more economical alternative**

In the absence of having EGI's assessments, FRPO considered whether the Ridgetown line may provide enhanced project economics over the proposed project. Since the confidential map provides little information on distances, we used Google Maps to estimate the distance from the Ridge Landfill to the Ridgetown Line. The distance estimated was less than 5km and could be as little as 80% of the distance of the proposed project connection near the Blenheim North Station. This relative proximity has the potential to reduce the project costs by shortening the pipeline.

In addition, the Ridgetown Line is a 3450 kPa Maximum Operating Pressure (MOP) pipeline as opposed to the Chatham East Line that has a 6040 kPa MOP. The reduced pressure of this alternative could be very significant for two reasons:

- 1) While 3450 kPa is still high pressure, the hoop stress generated in the pipe would still be substantially less than the 6040 kPa. This reduced hoop stress should allow EGI to use 4.8 mm wall thickness for the pipeline as opposed to the proposed 6.0 mm. Our calculations indicate that the thinner wall pipe would actually have less Hoop Stress than the thicker walled pipe at the higher pressure (thus no greater maintenance requirement). A reduction in wall thickness would result in savings on the material cost and, very likely, the labour costs to install.
- 2) Probably of more economic value is the reduction in pressure requirement as accessing the 3450 kPa pipeline would substantially reduce the compression costs for the operator of the Landfill. The pressure of methane extracted from any landfill is just above atmospheric pressure requiring compression of the gas. This pressure must be sufficient to move through the access pipeline and still be greater than the receiving pipeline for the RNG to be "injected". A considerable reduction in the amount of compression required by the Landfill operation would result in significant cost savings making the entire project more economic.

Since no analysis of alternatives was provided, we do not know the demand available on the Ridgetown Line. However, the market available is not limited by customers attached to this pipeline only. The Ridgetown Line connects with the Wheatley Line and Windsor Line at the same pressure and the Sarnia South Line which operates at a lower pressure but feeds larger markets in and around Chatham. In fact, injecting Ridge Landfill gas into the Ridgetown Line will reduce the amount of gas needed from Dawn to feed these most southerly areas of the Ontario gas network.

It is possible that some alterations to connections such as the Port Alma station could be required but station costs are generally significantly lower than pipeline costs.

However, we firmly believe that operating the network appropriately (adjusting pressures to allow market access while maintaining system integrity) would provide ample market for the Landfill gas at the stated maximum delivery parameters. In our view, this type of market analysis, seasonally adjusted, as required, should be provided by EGI to the market proponent and the Board.

While our analysis is based on some information in the application, as well as some estimates from simple, publicly available tools and our technical experience, we ask that EGI provide the Board with their analysis of this alternative with their Reply argument. We would expect that the analysis would include:

- i) The length of main from Ridge Landfill travelling directly southeast on Erieau to the Ridgetown line near Old Street Line
- ii) The acceptability of the pressure drop at the lower line pressures from Ridge Landfill to the Ridgetown Line
- iii) The acceptability of thinner wall pipe
  - a. The cost estimate, material & labour, using the thinner walled pipe
  - b. Confirmation that the thinner walled pipe would have lower Hoop Stress and thus have no greater maintenance
- iv) Confirmation of market availability using the Ridgetown Line connection

In our respectful submission, this type of alternative analysis ought to have been filed with the application and, if not, certainly been made available upon request as it was in FRPO's interrogatory response. While we may not be in a position to assist the Board further in this application, we encourage the Board, at their own discretion, to provide the utility with clear direction on alternative assessment for future RNG producer applications.

FRPO respectfully submits that the Ridgetown Line alternative warrants more than simple consideration and therefore urges the Board order that EGI file an analysis of the potential for a NPS 4 line from the Ridge Landfill to Ridgetown line as an alternative.

### ISSUE 3 – PROJECT COST AND ECONOMICS

Generally speaking, for most LTC applications, this issue is focused on the evaluation of the project costs and their recovery from customers served and/or ratepayers. However, in the case of this RNG project, the proponent has agreed to bear the costs upfront, reducing risks to ratepayers. However, from a societal perspective, choosing the most effective project and understanding recoveries embedded in the rates is important to reduce the risk that other potential projects are not inhibited by undue financial barriers.

### EGI Did Not Provide Cost Basis for Rates Charged

In our interrogatory FRPO.8, we asked about the **actual** costs that are being recovered by the M13 in moving gas to the Delivery Point of Dawn. EGI provided a response that: *“The transmission commodity charge provides recovery of costs associated with the Company’s pipeline system between the production location and Dawn and the delivery commodity charge contributes toward the cost of unaccounted for gas.”*

While this answer seems to make sense in the traditional cost recovery of a utility, the fact is the RNG commodity never goes to Dawn. As was being described above, EGI reviews the market available to ensure that the “market demands can meet the injected volumes.”<sup>2</sup> The utility does this because it knows the gas cannot flow upstream against pressure and/or backwards through pressure-cutting regulation stations. In very simple terms, **the gas can never physically reach Dawn**. The RNG gas is “moved” to Dawn using displacement.<sup>3</sup>

It is with this understanding, we specifically asked our questions in FRPO.8 about the actual costs incurred, including fuel, which is to be paid on top of the commodity charges outlined in EGI’s limited response. We did not receive a clear answer as the pipeline system between the production location and Dawn is not used to “move the gas” back to Dawn. This fact makes the determination of pipeline costs for recovery difficult. Further, we did not receive an answer on actual fuel costs.

Further, the M13 contract employs a Hub Contract that is used to balance the difference between Market Quantity and Dawn Quantity. This contract charges a cost of \$0.05/GJ for all differential quantities as a notional storage cost at Dawn. However, since the gas never physically reaches Dawn, it is clear that this balancing is provided through changes in linepack in the pipes that the gas actually reaches. There is, arguably, no cost to the utility unless the tolerance is abused. The Hub Contract addresses this potential for abuse by assigning significantly increased costs of \$3/GJ during key operational periods.<sup>4</sup> However, changes in the demands of the system and EGI’s operation of the pipes in the Market area may have more effect on the variances than anything that the RNG producer may be able to do.

FRPO respects that the determination of the rates for the M13 rate class among all services will be the subject of the EGI 2024 Rebasing proceeding. However, we

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<sup>2</sup> Exhibit I.FRPO.1

<sup>3</sup> Displacement transactions permit the lateral movement of gas through a transportation network. The configuration of many pipelines is such that it may not be apparent whether a given movement of gas is forward or backward from the point of receipt. It can be argued that all transportation service is performed by displacement as the physical delivery of the same molecules of gas is impossible. Source: [www.aga.org/natural-gas/glossary](http://www.aga.org/natural-gas/glossary)

<sup>4</sup> Exhibit E, Tab 1, Schedule 1, Attachment 1, Page 11

understand more deeply that these identified costs go into the economics of the feasibility for the Project Proponent. Further, as confirmed by EGI,<sup>5</sup> these incremental revenues were not considered in the determination of the Contribution-in-Aid of Construction. In our respectful submission, we believe there is need for EGI's economic treatment of these type of projects to be considered in light of non-discriminatory access to the EGI pipeline system.

### ADDITIONAL CONCERNS

Given EGI's stated goals of Energy Transition and this application being, in our understanding, the first LTC application to facilitate RNG getting to market, we believed the evidence provided and interrogatory responses would have demonstrated EGI's role as a facilitator of access to the pipeline system. However, the lack of provision of evidence or IR responses on the project alternatives does not align with a utility advancing the opportunities of Energy Transition.

As a simple further example, the map provided under confidentiality provisions<sup>6</sup> unnecessarily inhibited understanding. The format chosen and the two reasons (*in italics below*) for the requested confidential treatment require some consideration.

- 1) *The redactions relate to the locations and pressure ratings of Enbridge Gas critical infrastructure. Public disclosure poses both a safety and a security risk as it may allow third parties to determine gas system configurations and points of sensitivity or vulnerability that may expose Enbridge Gas to security risks.*

First, the scale of the map made it very difficult to understand where these pipes were actually located. Frankly, by knowing the general area, one, including FRPO, could simply go to Google Maps Street view and find the pipeline markers to know the precise location. This information is clearly in the public realm and the confidential treatment of a high-level map, in our view, provides no protection - only additional work for those seeking understanding.

If EGI simply provided a map such as the Map of Existing Chatham-Kent Pipeline Network, the Board and intervenors would be duly informed. The Board needs this type of information to assess the utility's planning.

- 2) *Further, persons planning developments or excavation projects may attempt to use the facilities information in substitution for required facilities locates, notwithstanding the fact that obtaining locates is required by law.*

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<sup>5</sup> Exhibit I.FRPO.9

<sup>6</sup> Exhibit I.FRPO.1- Confidential Figure 1

To find the surrounding pipelines and determine the proximity to the Landfill, we used Google Maps Street view to find the pipeline markers and ultimately estimate the distance. These pipeline markers are required by the CSA Z662 Pipeline Code and are overseen by the Technical Standards and Safety Authority to ensure prospective excavators are warned of the presence of gas in rural areas. Surely, if one were to plan an excavation in these areas, the pipeline markers, placed at prescribed intervals, would provide a much more specific location of a pipe than the map that EGI filed with requested confidentiality.

In our respectful submission, the confidential filing of this map and the format chosen suggests reasons other than those cited.

## CONCLUSION

In our respectful submission, EGI did not meet its onus of demonstrating that the proposed project is in the public interest, primarily through its lack of demonstration of the assessment of alternatives. As outlined above, we urge the Board to require EGI to file a full assessment of the Ridgetown Line connection as an alternative. If not provided as part of EGI's Reply argument, FRPO submits that the Board should reject the application and direct a re-filing of an application that meets the Board's objectives and statutory obligations.

ALL OF WHICH IS RESPECTFULLY SUBMITTED ON BEHALF OF FRPO,

Dwayne R. Quinn  
Principal  
DR QUINN & ASSOCIATES LTD.