

Background

Enbridge Gas Inc. (“EGI”) filed its application to replace the current NPS 10 Windsor Line with NPS 6 at an increased operating pressure. Our concern from the outset was: why does the project have to be one-size when its function has changed dramatically since its original installation? As noted previously¹, the original sizing of the Windsor (NPS 10 with some 8) was to facilitate the distribution of locally produced gas flowing west from Port Alma. Gas was collected at the site from wells on land and in Lake Erie. At Port Alma, it was scrubbed of hydrogen sulfide, compressed and sent to surrounding markets including west on the Windsor Line. The Port Alma scrubber was taken out of service decades ago.

During discovery, questions were asked focused on the appropriate sizing for the eastern half of the project. However, it was only late in the discovery where assertions were made about inquiries for service on the eastern end. Even responses to undertakings that asked specific distances along the pipe for the inquires resulted in very non-specific responses.²

An oral hearing was requested to try to establish more specific evidence, but the Board determined that an oral hearing would not be helpful to resolve concerns. However, the Board asked for the applicant to justify the sizing in its Argument-in-Chief³ with reference to the evidentiary basis. In our view, EGI failed to provide more credible argument in support of its sizing.

In our submissions, we will provide assessment of the EGI argument and present evidence or lack thereof from the proceeding to support our position that EGI has not met its onus. Some of our argument will reiterate facts and assessment from our communications with the Board on this matter. We provide those specifics because

¹ FRPO_REQ DISCOVERY_20191109

² Exhibit JT1.15

³ OEBltr_EGI_WINDSOR PIPELINE LTC_20200113

these perspectives have not been responded to by the applicant with more than generalities.

As a result, if the Board must decide based upon the evidence, it is our respectful submission that there is no evidence to support NPS 6 sizing on the eastern half of the project and the application must be rejected. But out of respect for the Board's time and authority to apply discretion, we respectfully propose a process to establish additional confidence in the appropriate sizing.

NPS 6 Requires Justification that Has Yet to Appear beyond Speculation

From the outset, our pursuit was trying to determine the justification for the same size of pipe going east and west from the prime source of gas at Comber. In its letter prior to the release of Procedural Order No. 5 to which we are responding, the Board requested EGI to address its onus in its Argument-in-Chief and "In particular, the AIC should address the need and prudence for the size of the pipeline sought to be built with reference to the appropriate sections of the evidence."⁴ In our view, as with answers to discovery inquiries, the submitted argument is short on specifics and deflects the heart of the issue. To assist the Board, we will follow the Enbridge submission for flow.

Like for Like Sizing is not Appropriate Justification for Sizing

One of the most telling statements from the Enbridge argument is the opening statement in defense of its use of NPS 6 for the entire project⁵:

"Although Enbridge Gas has seen increased natural gas demand within the Region of Windsor Facilities Business Plan ("FBP") Study, due to the location of this forecasted growth it was not a major consideration when designing the Proposed Pipeline. Rather, the Proposed Pipeline was designed as a "like-for-like" replacement with the existing NPS 10 Windsor Line in terms of capacity."

In our view, "like-for-like" should not constitute a disciplined approach to investment as prudent sizing is accomplished by designing using best information available on the current and future needs.

⁴ OEBltr_EGI_WINDSOR PIPELINE LTC_20200113

⁵ EGI_ARGChief_20200127, page 8, para. 24

Hybrid Sizing Ought to be Considered Given Surplus Capacity Available

EGI's argument asserts⁶:

“As for the proposed hybrid option (NPS 4 and NPS 6) Enbridge Gas responded that since 40% of the proposed line requires the capacity of NPS 6 if the hybrid option were used, Enbridge Gas would be unable to meet unforecasted demand of commercial and industrial customers outside the Windsor FBP (see Exhibit I.FRPO.15).”

As a result of the answer to FRPO.15, we asked in advance of the Technical Conference for the surplus capacity over and above existing requirements at Port Alma. Using Scenario 2 in respect of the maximum pressure limitation, after 10 years of growth from the facilities business plan, the NPS 4 design provides 70 times that required capacity⁷. That analysis provided by the company is inconsistent with statement above from the Enbridge argument. The question is how much speculative capacity should be allowed to be installed. If this were a case of system expansion, the cost of the installed pipe would have to be justified by the expected load or an aid-to-construction would have to be applied. We respectfully submit that, as a result of the lack of an economic test for a replacement project, the company should still be held to a standard of prudent investment.

Operational Benefits not Clearly Evidenced

EGI evidence states⁸:

Downsizing any portion of the Project to NPS 4 will limit future growth potential, including any unanticipated future growth as a portion of NPS 4 will be a bottleneck on the system. It is also inefficient and imprudent to downsize any portion of a pipe that is capable of flow in both directions for emergency and/or maintenance related events.

We are very concerned with development of “evidence” in relation to flows on the Windsor Line. In reading this submission, we were perplexed given our understanding to that point, that the flow direction was only one way, from Comber to Port Alma. We

⁶ EGI_ARGChief_20200127, page 9, para. 25

⁷ Exhibit KT1.2

⁸ EGI_ARGChief_20200127, page 9, para. 26 repeated from EGI_ReplySUB_Windsor LTC_20191114

reviewed our interrogatories that asked EGI for all “interconnecting”⁹ and “all other”¹⁰ pipelines. In both cases, the responses came back showing Port Alma as a dead-end with **no** connecting pipelines. However, upon reviewing the evidence once again, it is clear that the Windsor Line has interconnection with **3** lines¹¹:

The Windsor Line can also feed into Port Alma Station, located along Port Road at Talbot Trail, in the Municipality of Chatham-Kent. It is through this connection that the Windsor Line can be used to supply a backfeed into the 1380 kPa Sarnia South Line, the 3450 kPa Leamington East Line and the 3450 kPa Ridgetown Line to supplement gas flows during emergency operations. Under routine operations, the Windsor Line does not flow into these pipelines.

Clearly, there are interconnections, two of which will now be at the same higher operating pressure as the Windsor Line if increased to 3450 kPa. However, by relying on the interrogatory responses for the Technical Conference, we were precluded from asking questions about how the interconnection of the Leamington and Ridgetown Lines may be used to feed the Windsor Line system. Frankly, at this time, the size and capability of those lines to meet unforecasted needs is not in the evidence. The only reference that may refer to these pipelines dismisses them without specificity.¹²

3.5.5 Joining Previously Independent Distribution Systems

The distribution systems near the Windsor Line are not large enough to serve all of the existing and forecasted demands along the Replacement Pipeline without requiring significant reinforcement and additional facilities. This option was therefore eliminated.

We are concerned that omissions from discovery process hindered the Board’s ability to consider potentially reasonable alternatives to the one preferred by the Company. This concern is heightened by the evidence in the Project Charter which includes a section entitled Key Commercial Drivers speaks to flow **coming from** Port Alma¹³.

⁹ Exhibit I.FRPO.6

¹⁰ Exhibit I.FRPO.7

¹¹ Exhibit C, Tab 3, Schedule 1, Page 8

¹² Exhibit C, Tab 3, Schedule 1, Page 20

¹³ Exhibit JT1.17. Attachment 2, Page 7

2.2 Key Commercial Drivers

*The new pipeline being installed should be tested as NPS 6 3450 kPa and this will provide excess Capacity up to 40,000 m³/h; which will help to continue to serve the growing demands of the greenhouse market. This will be achieved by feeding both directions from Sandwich Compressor **and Port Alma**, also a HP tie in at Comber Station at the higher pressure. (emphasis added)*

On its face, this excerpt demonstrates that the attached pipeline(s) could provide feed potentially even to meet unforecasted load. However, at this juncture of the proceeding, the Board does not have evidence to understand the capabilities of alternatives to meet the unforecasted load which seems to be the main driver of the company's preference for NPS 6 sizing.

The Lack of Specificity around Customer Inquiries Warrants Examination

EGI argues:

“Enbridge Gas also acknowledged it has received inquiries surrounding the Port Alma area in the past two years⁴. In its response to Undertakings, Enbridge Gas advised it had received inquiries of approximately 8,000 m³/hour east of Comber.”

This assertion responds to our request in JT1.15. The following is the wording of the Undertaking in question.

UNDERTAKING NO. JT1.15: TO PROVIDE DATA ON ALL CUSTOMER DEMAND EAST OF COMBER IN THE LAST TWO YEARS, INCLUDING CUSTOMER(S)' DISTANCE EAST OF THE T IN THE INTERSECTION NORTH OF THE COMBER TRANSMISSION STATION, AND REDACTED AS APPROPRIATE

As is captured above as a summary of the response, the inquiries were from the “Port Alma and surrounding area”. There is no provision of how far east of Comber these inquiries are, which would dictate pipe sizing. Further when the number 8,000 m³/hr is used, the qualifier is “east of Comber”. These nebulous responses draw the question, “why the lack of specificity”.

First, the inquiries are not necessarily current customers as the response to our request on existing and future loads show little load beyond the Tilbury load¹⁴. Second, they are not necessarily even potential customers as depending the location, there may have been too great of an aid-to-construct which precluded attachment. In fact, we still do not know if these are individual customer inquiries or if multiple inquiries came from the same party seeking a location for a facility. Further if these customers are “in Port Alma and the surrounding area”, it is entirely possible that the customer could be fed by one of these interconnecting pipelines. If these customers are or could be serviced from the other interconnecting pipelines that would be inconsistent with the specific request made:¹⁵

MR. QUINN: I just want a clarification on the last undertaking. I appreciate the company's willingness to provide customer requests.

To be specific, though, we are looking for customer requests on the Windsor line east of the Comber transmission. I don't know if the company understood that.

So what I would like to ask is that with the requests that get filed -- redacted or confidentially, whichever way -- that the company would identify what is the distance that that customer request is east of the T in the intersection north of the Comber Transmission Station.

MR. PANNU: Yes, that's fine.

MR. QUINN: Okay, thank you very much. That is an important clarification we wanted to make sure was on the record.

We are concerned about the actual location of these customer inquiries since the EGI witnesses stated that they believed that one of customers had come on¹⁶. Yet, when we asked about the load on the Windsor Line east of Comber now and in 2029¹⁷ there is little existing or future load of the scale that the Company asserted.

¹⁴ Exhibit JT1.2

¹⁵ TC1 Transcript, Dec. 5, 2019, pg. 51

¹⁶ TC1 Transcript, Dec. 5, 2019, page 49, line 7

¹⁷ Exhibit JT1.2

Unreasonable Estimates Minimize Alternative Differences

The Board must be able to rely on project estimates provided by the proponent.

Estimates by their nature have embedded imprecision. But the estimates should be reasonable.

EGI asserts:

In addition, at Exhibit JT1.9 Enbridge Gas was able to provide an average unit cost to install NPS 2, NPS 4 and NPS 6 in the Windsor Region over the past five years. FRPO is relying on the unit costs and cost differences to support the submission that the Windsor Line at NPS 6 and the hybrid NPS 4/6 option cannot be a difference of \$800,000. The primary difference between the NPS 6 and the hybrid NPS 4/6 stems from materials. Enbridge Gas cautioned that using the projects above were not appropriate comparison data points because these average unit costs resulted from small pipeline projects such as new general infill expansion enhancement to existing pipelines (i.e. small reinforcements).

Notwithstanding EGI's assertion, we are not using "small pipeline projects such as new general infill expansion enhancement to existing pipelines", the following projects are large, new or reinforcement projects. The projects provided were all installations of new pipe and provide of comparison of the cost of installing NPS 4 versus NPS 6.

Project	Size	Length (km)	Total Cost (\$M)	Cost per unit length (\$M/km)	Contractor cost (\$M)	Contractor cost per unit (\$M/km)
Milverton ¹⁸	NPS 4	20.5	3.29	0.16	<3.29	<0.16
CFB Trenton ¹⁹	NPS 6/8*	12.9	6.88	0.53	5.16	0.40
CREEKFORD ²⁰	NPS 6	4.5	2.35	0.52	2.09	0.46

* Over 90% of the CFB project was NPS 6 with the remaining NPS 8

¹⁸ Exhibit KT1.4 using estimated Year and clarifications provided in JT1.8 – however contractor cost not provided for steel only.

¹⁹ Exhibit KT1.4 and

²⁰ Exhibit KT1.4 and JT1.5

These costs evidence that the unit cost for the NPS 4 project cost was less than one-third of the cost of the NPS 6. It should also be noted that the contractor cost per unit length for NPS 4 was less than half of the unit cost for NPS 6. While we respect that the nature of projects and locations impact costs, it should be able to be concluded that the contractor installation cost for NPS 6 is greater than NPS 4.

One way of reducing the variability of estimates is to hold constant those items that are the same for each alternative and receive market-based bids for other aspects. In looking at the Windsor Line Replacement, it stands to reason that costs for company resources, lands, stations, etc. will be constant. Therefore, the only variables would be the cost of the material for the pipe and the contractor costs to install the pipe.

We asked for company standard material price list values for the unit cost of steel pipe²¹. The undertaking provided that NPS 6 was generally almost twice the cost of NPS 4. But the undertaking went on to clarify that for larger projects, the company requests specific quotes resulting in a narrowing the difference between the material cost for NPS 4 and 6. But even using, the smaller differential provided in JT1.12, we have calculated the estimated cost differential for the pipe on eastern leg of the project

NPS 6	\$50/m	x 32,200m=	\$16.1M
NPS 4	\$36/m	x32,200m=	\$11.6M

DIFFERENTIAL = \$4.5M (not including up-size of all fittings beyond pipe)

Therefore, since the bid cost of the material is \$4.5M more for NPS 6, to estimate a difference of \$0.8M for the total cost means the company estimated that the contractor would charge approximately \$3.2M **more** to install NPS 4 than NPS 6. This is inconsistent with the evidence from recent projects presented above and, frankly, defies logic.

Not only does this estimate demonstrate the Company's bias toward their preferred alternative, but also it calls into question other analysis of alternatives and other estimates that the Board expects to count on as thorough and objective.

²¹ Exhibit JT1.12

Integrity Evidence Falls Short of Compelling

While pipeline integrity has not been an issue that we have pursued, in listening to the answers provided by the Company, we did become concerned²². For efficiency, we have previewed the submission of Energy Probe on integrity issues and overheads applied to this project that already recovered in the deferred rebasing rates and support their submissions.

Conclusion

In our respectful submission, EGI has not met their onus to demonstrate with evidence that NPS 6 is the appropriate size for the eastern leg of the Windsor Line replacement using 3450 kPa. Thus, we would urge the Board not to approve the application as presented until the applicant can provide more compelling evidence. We understand the company would have a duty to mitigate in the interim and would expect them to do so.

However, in the alternative, given the Board's discretion, we would suggest that the Board could defer deciding application until discovery is complete in EB-2019-0194 where EGI is applying for an ICM for this project. As a result of not receiving specific answers in the current application, FRPO asked additional questions on customer inquiries which may provide the Board some of the evidence that we submit is missing from this docket.

ALL OF WHICH IS RESPECTFULLY SUBMITTED ON BEHALF OF FRPO,



Dwayne R. Quinn
Principal
DR QUINN & ASSOCIATES LTD

²² TC1 Transcript, Dec. 5, 2019, pages 87-90