National Energy Board

Office national de l'énergie

File OF-Fac-Oil-E101-2012-10 02
5 May 2015

Les Citoyens au Courant
Attn: Ms. Katherine Massam
271 Main Street
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Facsimile 514-316-8143

Madame Lorraine Caron
1705 rue du Bordeaux
Saint-Lazare, QC J7T 2C1

Dear Ms. Massam and Ms. Caron:

**Enbridge Pipelines Inc. (Enbridge)**
**Line 9B Reversal and Line 9 Capacity Expansion Project (Project)**
**Request for Review of the Board's decision of 5 February 2015**

The National Energy Board has received requests from Les Citoyens au Courant (COC), dated 9 March 2015 (A4J3D7), and Lorraine Caron, dated 27 February 2015 (A4J0H1) (the Requests), requesting a review of the Board's 5 February 2015 decision to approve Enbridge's submissions for condition 16 of Order XO-E101-003-2014 (the Decision).

Pursuant to paragraph 45(1)(a) of the *National Energy Board Rules of Practice and Procedure, 1995* (the Rules), the Board is of the view that the Requests do not raise a doubt as to the correctness of the Decision and therefore dismisses the Requests.

In the Decision, the Board considered whether Enbridge's Intelligent Valve Placement (IVP) methodology was in the public interest, which required the Board to consider the risks and benefits of adding valves to an existing pipeline. The Board found that, using the IVP methodology, Enbridge added 17 valves where they would be most useful to reduce the impact in the case of a failure. The Board noted that the goal of the IVP methodology is to protect the public and the environment in the entire area, rather than focusing on specific water crossings.

Grounds for the Requests

COC argued that the Board made three errors in the Decision:

1. By determining that Enbridge's IVP methodology meets or exceeds CSA Z662-11, clause 4.4.8 and, accordingly, satisfies condition 16(a);
2. By determining that, through Enbridge's IVP methodology, the maximum release volume between valves is as low as reasonably practicable; and

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3. By determining that Enbridge provided sufficient criteria and rationale for using 8 manually operated valves (MOV) on the pipeline.

Ms. Caron provided similar arguments and also questioned whether Enbridge's application for Leave to Open was filed prematurely.

The Rules, in paragraph 44(2)(b), set out three grounds that may raise a doubt as to the correctness of a decision:

(i) Any error of law or jurisdiction,
(ii) Changed circumstances or new facts, or
(iii) Facts that were not originally placed in evidence.

The Requests suggest that the Board made errors of law. They do not raise any new facts nor provide any facts that were not in evidence at the time of the Decision. They refer to the evidence on the record before the Board, which includes the following documents:

- 9 June 2014: Enbridge's initial submission for condition 16 (A65779)
- 21 August 2014: Enbridge's response to Information Request #1 (A62368)
- 6 October 2014: The Board's letter rejecting the initial submission (A63315)
- 23 October 2014: Enbridge's updated submission for condition 16 (A63771)
- 27 November 2014: Enbridge's response to Information Request #4 (A64624)

Ground 1: CSA Z662-11, clause 4.4.8

The Requests reference the requirements of CSA Z662-11, clause 4.4.8, which states:

> For HVP and LVP pipelines, valves shall be installed on both sides of major water crossings and at other locations appropriate for the terrain in order to limit damage from accidental discharge.

CSA Z662-11 also includes clause 1.4, which states:

> This Standard is intended to establish essential requirements and minimum standards for the design, construction, operation, and maintenance of oil and gas industry pipeline systems. This Standard is not a design handbook, and competent engineering judgement should be employed with its use.

The Board's 6 October 2014 letter refers to valves being installed more than 10 km from at least one side of several water crossings. It then asked for further explanation from Enbridge with respect to how its valve placement meets or exceeds CSA Z662-11.

Enbridge provided the requested further explanation in its 23 October 2014 submission, where it described the IVP methodology as a formalized approach to applying competent engineering judgement to valve placement.

Enbridge indicated that it optimized valve placement along the entire pipeline route, "taking into account the topography of the right of way, the elevation profile of the pipeline, the throughput of the line and the location of watercourses." It further noted that:

> ...valve locations are influenced by a number of factors, including: topography; location of flood plains; and the presence of HCAs [high consequence areas]. ... While the IVP methodology specifies optimal placements to limit release volumes, specific siting considerations – such as access to power supply for remote-controlled valves, flood plains, and potential landowner concerns – may have a bearing on actual valve locations.

As the Board indicated in the Decision, valves have inherent risks and placing a valve in a sensitive area may create a risk that outweighs the benefits. Clause 4.4.8 does not specify the appropriate distance between valves and water crossings. As such, the fact that there are not valves within a certain distance of all major water crossings does not indicate that CSA Z662-11 has not been met.

The Board is not persuaded that a doubt has been raised regarding the correctness of the Decision on this ground.

Ground 2: Maximum Release Volumes

The Requests argue that the maximum release volumes, particularly in the region of Vaudreuil-Soulanges, are too high to be acceptable. Condition 16(b) requires that Enbridge "demonstrate and explain why it believes that the maximum release volume between valves is as low as reasonably practicable...."

In its 23 October 2014 submission, Enbridge indicated that it modelled various valve placements to determine the average maximum release volumes in a worst case scenario – "a complete rupture of the line occurring precisely at the lowest elevation between isolation points while the line is operating at full design throughput until the valves are closed" – a scenario unlikely to actually occur. By adding the next 11 valves that would have the greatest net effect on release volumes to the model, the average maximum release volume was reduced by only 3.2%. Enbridge stated that "the effect of adding the identified additional valves becomes marginal when you balance the maximum release volume reduction against the environmental disruption, landowner concerns, and other practical limitations of installing valves."

By approving Enbridge's submissions for condition 16 in the Decision, the Board agreed with Enbridge's assessment that the low reduction in average maximum release volumes is outweighed by the impacts associated with installing valves and is therefore as low as reasonably practicable.

The Board is not persuaded that a doubt has been raised regarding the correctness of the Decision on this ground.

Ground 3: Manually Operated Valves

The Requests argue that the data provided by Enbridge do not support its conclusion that the conversion of manually operated valves to remotely operated valves would not reduce the volume of a release by a significant quantity.

In its 9 June 2014 submission, Enbridge stated that "An analysis was performed on the eight remaining manual valves on Line 9 and it was found that these valves would not reduce the volume out in the event of a release by a significant quantity." Enbridge also provided a graph for three of the eight valves, showing that they have minimal benefit if converted to remote controlled operation, and that the benefit arises only if a failure occurs in a very specific area. Conversion to remote operation requires additional equipment, access to power, landowner permission and environmental and construction permits.

In its 23 October 2014 submission, Enbridge indicated that, in its modelling, it took the approach of assuming that existing manual valves would not be used in the case of a release. The resulting maximum release volumes were calculated as if these valves were not closed. In reality, the valves will be operable and accessible and "if the specific circumstances of a release warranted it, [Enbridge] would mobilize resources to operate the manual valves to provide an additional layer of isolation for those locations."

By approving Enbridge's submissions for condition 16 in the Decision, the Board agreed with Enbridge's assessment that the minimal benefit of converting these manually operated valves to remote operation is outweighed by considerations such as environmental impact and landowner concerns relating to conversion.

The Board is not persuaded that a doubt has been raised regarding the correctness of the Decision on this ground.

Ground 4: Timing of Leave to Open Application

In Ms. Caron's letter, she notes that Enbridge applied for leave to open less than 90 days after its last submission, that being the 27 November 2014 response to the Board's Information Request. The Board's 6 October 2014 letter required Enbridge to file a revised submission at least 90 days prior to applying for leave to open. Enbridge filed the revised submission on 23 October 2014, which is more than 90 days prior to their application for leave to open. The Board does not consider the response to an information request as starting a new time period for this purpose.

The Board is not persuaded that a doubt has been raised regarding the correctness of the Decision on this ground.

For these reasons, the Board finds that the Letters do not raise a doubt as to the correctness of the Decision and the Requests are dismissed. If you have any questions, please contact the Board at 1-800-899-1265.

Yours truly,

Sheri Young
Secretary of the Board

cc: Mr. Jesse Ho, Enbridge, 403-767-3863