



File OF-Fac-Oil-E101-2012-10 02
6 October 2014

Mr. Jesse Ho
Senior Regulatory Analyst
Enbridge Pipelines Inc.
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Dear Mr. Ho:

**Enbridge Pipelines Inc. (Enbridge)
Line 9B Reversal and Line 9 Capacity Expansion Project (Project)
Order XO-E101-003-2014 (Order)
Condition 16 Filing – Line 9 Intelligent Valve Placement Methodology and Results
Enbridge Response to NEB Information Request No. 1 for Condition 16**

The National Energy Board (Board) has concluded its review of the documents filed by Enbridge pursuant to Condition 16 of the Order, dated 09 June 2014, 07 August 2014 and 21 August 2014.

Upon review, the Board is not persuaded that Enbridge meets the requirements of Condition 16 of the Order and therefore, the Board does not approve Enbridge's submissions.

Condition 16(a) of the Order requires Enbridge to "demonstrate that the new Line 9 valves system meets or exceeds the requirements of CSA Z662-11 clause 4.4 Valve location and spacing, with particular reference to clause 4.4.8, note (2)". That standard reads as follows:

4.4.8

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.

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Notes:

- (1) Consideration should be given to the installation of check valves to provide automatic blockage of the pipeline.
- (2) A major water crossing means a water crossing that in the event of an uncontrolled product release poses a significant risk to the public or the environment.[emphasis added]

Enbridge has not provided adequate information regarding the location and spacing of the Line 9 valves. The CSA Z662-11 requirement to place valves on both sides of a water crossing is tied to the determination of major water crossings (MWCs).

In the Reasons for Decision for the Project (RFD), the Board stated that "...Enbridge is expected to demonstrate how it has satisfied [Condition 16] along the length of Line 9, including a description of the criteria used by Enbridge to identify major water crossings..."

The Board is of the view that Enbridge's criteria for determining MWCs are not adequate and that Enbridge's interpretation of a MWC does not comply with the intention of CSA Z662-11. CSA Z662-11 specifically references a "significant risk to the [...] environment". [emphasis added] The Board notes that during the proceeding, Enbridge explained that it analyzed its levels of risk in terms of High Consequence Areas (HCA) which include five (5) types: highly populated areas (HPA), other populated areas, drinking water resources, environmentally sensitive areas and commercially navigable waterways (response to NEB IR 4.10) ([A3K8E9](#)).

The Board is of the view that Enbridge should prepare a new description of the criteria that Enbridge will use to determine whether a watercourse crossing is considered 'major'. The new description of the criteria should not be limited to HPA, but must align with Enbridge's broad approach to risk assessment and must consider HCAs. Enbridge must then apply the new criteria to each water crossing in order to demonstrate that it has appropriately identified all MWCs. The Board notes that a mere assertion or statement that Enbridge has identified all MWCs is not the equivalent of a demonstration. The Board anticipates that the number of MWCs may be adjusted after the preparation of and application of new criteria.

As noted above, CSA Z662-11 states that valves shall be installed on both sides of MWCs. The valves do not appear to be placed on both sides of many of the MWCs. Although in its response to Information Request No. 1 for Condition 16, Enbridge added 85 MWCs to its original list of MWCs, Enbridge did not adjust the number of valves to the Project, for example by increasing the number of valves, or explain why the number remained unchanged. As a result, the Board notes that only 6 of the 104 MWCs identified by Enbridge to date appear to have valves installed within 1 km on both sides of the water crossing, while the majority appear to have valves installed more than 10 km from the water crossing on at least one side. To comply with Condition 16(a) of the Order, the Board is of the view that Enbridge must provide sufficient rationale on how the placement of Enbridge's valves meet or exceed CSA Z662-11 and accordingly, are installed on both sides of MWCs.

Condition 16(b) of the Order requires Enbridge to “...demonstrate and explain why it believes that the maximum release volume between valves is low as reasonably practicable...” [emphasis added].

Enbridge provided the following rationale in its Condition 16(b) submission:

Enbridge performed an analysis of the potential benefit of placing additional valves beyond the 17 selected, which confirmed that any additional valves would have minimal impact on reducing volume out in the event of a release and therefore, considering the risks associated with valves, as discussed below, would not be reasonably practicable.

After placing the additional 17 valves, Enbridge believes it has reduced the volume out for Line 9 to a manageable level and the lowest level reasonably practicable.

The Board is of the view that Enbridge has not provided the data to sufficiently demonstrate or explain why the maximum release volume between valves is as low as practicable. The Board reminds Enbridge that Condition 16(b) is not restricted to MWCs, but also applies to all watercourses, water intakes, urban infrastructure, and ecologically sensitive areas.

The Board cannot properly assess Conditions 16 (c), (d), and (e) without further submissions from Enbridge.

The Board takes protection of people and the environment seriously and it expects the same of the companies it regulates. Enbridge must meet all requirements set out in the Order and the RFD.

The Board directs Enbridge to file, at least 90 days prior to applying for the final leave to open of the Project, a revised submission for Condition 16 of the Order.

If you have any questions about the above information, please call the Board toll free at 1-800-899-1265.

Yours truly,

Original signed by L. George for

Sheri Young
Secretary of the Board

c.c.: Mr. Leon Zupan, Chief Operating Officer, facsimile 403-231-3920