



ONTARIO ENERGY BOARD

STAFF SUBMISSION

Enbridge Gas Distribution -

Application for Leave to Construct

Dow Moore, Corunna, Seckerton Pipeline Project

EB-2010-0302

March 9, 2011

The Proceeding

Enbridge Gas Distribution Inc. (the "Applicant" or "Enbridge") filed an application with the Ontario Energy Board (the "Board") on December 17, 2010, under section 90 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Schedule B for an order granting leave to construct approximately 3,500 meters of 4 segments of extra high pressure pipelines, to enhance pipeline connections between the Coruna, Seckerton and Dow Moore natural gas storage pools in the Township of St. Clair in Lambton County (the "Pipeline Project"). The Board has assigned the application file number EB-2010-0302.

The Board issued a Notice of Application and Hearing ("Notice") on January 20, 2011 and Enbridge served and published the Notice as directed by the Board. In response to the Notice, the Board received a letter of comment, dated February 5, 2011, from Mr. Tom Wilson on his own behalf and on behalf of Mr. Joe Wellington. Mr. Wilson and Mr. Wellington, landowners in the affected storage pool areas, requested "an oral hearing to be held locally". On February 9, 2011, the Board received a letter from Mr. Wellington requesting observer status. The Board granted observer status to Mr. Wellington. Union Gas Limited requested and was granted intervenor status in this proceeding.

The Board set out a written proceeding schedule in Procedural Order No. 1 issued on February 23, 2011. In accordance with the procedural schedule, Board Staff filed interrogatories ("IRs") on February 28, 2011, Enbridge responded to the IRs on March 3, 2011. Intervenor and Board staff submissions are due on March 9, 2010 and Enbridge's reply submission is due to be filed on Friday March 11, 2010.

Board Staff filed proposed conditions of approval as part of its interrogatories and Enbridge responded. Board staff have proposed certain modifications to these conditions of approval as set out in Appendix A to this submission. The need for these modifications is explained as part of this submission.

Board staff supports Enbridge's application subject to the conditions presented below. This submission reflects Board staff's position with respect to the application arising from Board staff's review of the case record. Board staff's submission addresses the following five issues:

- A Need for the Proposed Pipeline;
- B Cost of the Pipeline;
- C Land Matters and Landowner Issues;
- D Environmental Matters; and
- E Delta Pressuring.

Board staff has also addressed the matter of increased operating pressure, or delta pressuring, of the Corunna and Seckerton pools. Although this is not a matter for approval in this proceeding, Board staff reminds Enbridge that it must adhere to certain provincial regulations when natural gas storage operating parameters are changed.

A. Need for the Proposed Pipeline

The Pipeline Project is part of Enbridge's unregulated storage enhancement program which also includes replacement of the Corunna Pool Gathering Pipeline and delta pressuring (increasing the pressure) of the Corunna and Seckerton storage pools. Enbridge is seeking approval of the Board for the four segment pipeline project. The four proposed pipeline segments are required to move gas to and from the Seckerton, Corunna or Dow Moore storage reservoirs, and the Corunna Compressor Station. Construction is planned to start in June 2011. The pipeline is planned to be in-service for September 2011.

The Pipeline Project will add about 4.5 Bcf of storage capacity to Enbridge's market base storage services. Moreover, it is part of a series of storage enhancement projects which may add approximately 17.5 Bcf of unregulated storage capacity. Enbridge stated that the timeline for developing the full 17.5 Bcf of incremental storage will depend on the market demand for the services. The demand for the 4.5 Bcf of new storage has been secured in Enbridge's contracts executed on December 15, 2010. Enbridge obtained these contracts through open seasons held in March and November 2010.

Board staff notes that the need for the proposed pipeline is supported by the executed contracts for 4.5 Bcf of additional storage that this project will bring to the market.

B. Cost of the Pipeline

Enbridge has indicated that the project is funded by Enbridge's shareholders and will not be part of the regulated rate base. As such, Enbridge is not seeking a decision from the Board on the economic feasibility of the project. Accordingly, cost estimates were not filed as part of the evidence supporting this application. In response to Board staff interrogatory number 1 Enbridge confirmed that the cost for the construction of the Pipeline Project is outside of the Cost of Service and/or IRM applications of the regulated utility and in accordance with the Natural Gas Electricity Interface Review ("NGEIR").

Enbridge noted that; "Consistent with the NGEIR Decision, this project is funded by Enbridge's shareholders..." Enbridge stated on the record that it is preparing a report on the cost allocation between regulated and unregulated storage services which will be filed in March 2011 with the Earnings Sharing Mechanism proceeding. Enbridge, in response to a Board staff IR indicated that Enbridge's report will address cost allocation and will not address transactional services revenues. Enbridge further explained that this is consistent with Enbridge's commitment to the Board in the EB-2010-0042 Settlement Agreement (page 9) wherein it agreed to file "an analysis of the appropriate allocation of costs of regulated and unregulated storage operations." Enbridge further stated that due to the limited capacity of unregulated storage, Enbridge does not currently generate transaction service revenue from unregulated storage. However, should it commence offering transactional services Enbridge expects to file with the Board its proposed method for managing the transactional services revenues of its regulated and unregulated storage operations.

Board staff notes that Enbridge's evidence on the treatment of this unregulated Pipeline Project is in accordance with the NGEIR decision.

Related to this aspect of developing a non-utility asset Enbridge responded to a Board staff proposed condition of approval, specifically condition 1.5 which states:

1.5 Within 15 months of the final in-service date, Enbridge shall file with the Board Secretary a Post Construction Financial Report. The Report shall indicate the actual capital costs of the project and shall explain all significant variances from the estimates filed in the proceeding.

Enbridge stated that the Proposed Pipeline is part of its unregulated operations and as such condition 1.5 is not required and recommended it be removed. Board staff agrees with Enbridge's recommendation as the evidence indicates that the Proposed Pipeline and associated costs are not part of Enbridge's regulated business and as such will not be included in Enbridge's rate base.

C. Land Matters and Landowner Issues

The proposed pipeline route is on lands owned by Enbridge or on lands where Enbridge has rights to install the pipeline within designated storage pools under current and valid gas storage leases and agreements. Therefore, there are no additional land rights required for the Pipeline Project.

Enbridge stated that it would "continue to engage the affected landowners along the preferred route regarding the construction and operational matters related to the Project".

In response to the Notice, the Board received a letter of comment, dated February 5, 2011, from Mr. Tom Wilson on his own behalf and on behalf of Mr. Joe Wellington who are storage landowners in the Coruna Pool. The landowners raised concerns with their communication with Enbridge regarding the proposed project.

In response to Board staff interrogatory 5 Enbridge described its communication history and future plans for communications with Mr. Wilson and Mr. Wellington and with other affected landowners. Board staff submits that condition of approval 3.1 will ensure that Enbridge deals with landowner concerns appropriately:

- 3.1 Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Enbridge shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.

D. Environmental Matters

Stantec Consulting Inc. ("Stantec") conducted an environmental and routing study and completed the "Dow Moore, Corunna and Seckerton Pipeline Project Environmental Report" ("ER") in November 2010. The ER was completed in accordance with the Board's Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario (May 2003). Stantec filed an Addendum to the ER, dated December 16, 2010 ("Addendum"). The ER and the Addendum were reviewed by the Ontario Pipeline Coordinating Committee ("OPCC").

Enbridge stated that the construction of the pipeline will be conducted pursuant to the recommendations of the ER, the OPCC, Enbridge's Construction Manual and the Contract Specifications.

The Addendum to the ER included a recommendation from the Ministry of Natural Resources ("MNR") dated December 9, 2010 that Stantec obtain more information, either by field survey or from secondary sources, on the following: (i) Species at Risk ;(ii) Significant Wildlife Habitats;(iii) Significant woodlands; (iv) Significant wetlands; (v) Significant valleylands; and (vi) Petroleum resources. These were the only outstanding matters from the OPCC review of the ER.

In response to a Board staff IR, Enbridge filed copies of its correspondence with the MNR and outlined its commitment to address all of the MNRs concerns, as noted above, and collect additional information as requested by the MNR. Enbridge also explained that the construction schedule will not compromise the timing for the field survey and that the field surveys themselves would not delay the construction schedule for the pipeline.

Board staff has no concerns regarding environmental matters subject to all the commitments that Enbridge put on the record be met.

E. Delta Pressuring

The term “delta pressuring” means operating a storage pool above the discovery pressure which may be defined as the initial pressure of that reservoir at the time it was discovered.¹

Enbridge’s pre-filed evidence indicates that the storage enhancement also included “the first stage of delta pressuring of the Corunna and Seckerton natural gas storage pools, which does not require an application”. Board staff agrees that there is no requirement for Enbridge to apply to the Board for delta pressuring these pools. However, Board staff reminds Enbridge of the current provincial regulatory requirements under the jurisdiction of the Ministry of Natural Resources (“MNR”) with respect to increasing the operating pressure of a storage pool .

Board staff submits that the Corunna and Seckerton were designated as gas storage pools by the Board’s Order in E.B.O. 5 dated December 5, 1963 and they were put in service in 1964. No codes or regulations governing the operation of gas storage pools at higher pressure gradients were in effect at that time. That being said, since 1997, operation of gas storage pools in Ontario must conform to the Canadian Standards Association Z341 “Storage of Hydrocarbons in Underground Formations” (“CSA Z341”). The MNR has the provincial authority to oversee the implementation of the CSA Z341 under Ontario Regulation 245/97 of the *Oil, Gas and Salt Resources Act, R.S.O. 1990*.

The following sections of the CSA Z341 apply to operating pressures of storage pools:

7.6.2 Maximum operating pressure

The maximum operating pressure for the storage zone shall be

- (a) the discovery pressure of the reservoir; or
- (b) a higher pressure that has been shown by caprock testing (as specified in Clause 5.2) not to compromise the integrity of the storage zone. The maximum operating pressure shall not exceed 80% of the fracture pressure of the caprock formation. In the absence of local fracture pressure data, the maximum pressure shall be no greater than 18.1 kPa per metre of depth to the top of the reservoir.

¹ Natural gas storage pools are former natural gas and oil production reservoirs with the geological characteristics suitable for storage operations.

7.6.3 Delta pressure

Where the maximum operating pressure of the storage zone is planned to be above the discovery pressure of the reservoir, the operator shall determine the impact on reservoir integrity of the planned maximum delta pressure prior to injecting hydrocarbons at pressures exceeding the discovery pressure of the reservoir.

5.2.3 Core analysis

The caprock core that is recovered shall be analyzed to determine

- (a) threshold pressure;
- (b) porosity; and
- (c) permeability to air in the direction of maximum horizontal permeability, normal to the direction of maximum permeability, and in the vertical direction.”

Board staff notes that any increase in operating pressure of natural gas storage pools in Ontario should conform to the limits prescribed by CSA Z341 which is overseen by the MNR.

Recently, the Board approved two applications by Union Gas Limited to increase the operating pressures of natural gas storage pools in order to increase storage capacity. (Decision EB-2008-0038² dated July 10, 2008 and Decision EB-2009-0144³ dated July 31, 2009) . A consideration for the Board in determining if these approvals should be granted was whether or not Union was in compliance with the applicable sections of CSA Z341. In both proceedings the MNR was a participant. The Board found that, in both of the proceedings, that should Union wish to increase the operating pressure of the existing storage pools above 0.73 pounds per square inch per foot of depth, it must apply for leave of the Board and such an application should be supported with engineering and geological studies.

Board staff submits that delta pressuring or increasing the operating pressures in Enbridge's storage pools is subject to the same CSA Z341 regulatory requirements as

² This application by Union gas Limited dealt with operating pressures in Enniskillen 28 (EBRM 95), Oil Springs East (EBRM 167), Payne (EBRM 98) and Dow A (EBRM 172) Pools.

³ This application by Union Gas Limited dealt with increasing operating pressures of Bentpath East Pool (EBO 206), Oil City Pool and Bluewater Pool (RP-1999-0047).

delta pressuring of the Union's pools in the two above noted Board proceedings. Therefore, Board staff submits, as noted above that Enbridge is expected to comply with the CSA Z 341 under the authority of the MNR to ensure safe operations of its storage. Board Staff also suggest that it may not be necessary that Enbridge apply to the Board, because EBO 5 did not have any conditions related to the operating pressure increases as no CSA Z341, or equivalent, was in effect. Board Staff note that the MNR is a provincial authority responsible for implementing the CSA Z341 and therefore Board staff would expect that Enbridge would contact the MNR directly in order to ensure compliance with the CSA Z341.. Accordingly, Board staff recommend that the following condition be added to the Board conditions of approval as condition 4.2 under the "Other Approvals" section:

4.2. Enbridge shall comply with current CSA Z341 requirements for increasing the operating pressure of Corunna and Seckerton storage pools and shall file with the Ministry of Natural Resources any supporting studies or information as required by the CSA Z341.

All of which is respectfully submitted.

Appendix A
EB-2010-0302
Proposed Conditions of Approval

EB-2010-0302
March 9, 2011

Enbridge Gas Distribution Inc.
Leave to Construct Application
Board Staff Proposed Draft

Conditions of Approval

1 General Requirements

- 1.1 Enbridge Gas Distribution Inc. ("Enbridge") shall construct the facilities and restore the land in accordance with its application and the evidence filed in EB-2010-0302 except as modified by this Order and these Conditions of Approval.
- 1.2 Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2011, unless construction has commenced prior to that date.
- 1.3 Enbridge shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.
- 1.4 Enbridge shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Enbridge shall not make such change without prior approval of the Board or its designated representative. In the event of an emergency, the Board shall be informed immediately after the fact.

2 Project and Communications Requirements

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.
- 2.2 Enbridge shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. Enbridge shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.

- 2.3 Enbridge shall give the Board's designated representative and the Chair of the OPCC ten days written notice in advance of the commencement of the construction.
- 2.4 Enbridge shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Enbridge shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Enbridge shall furnish the Board's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Enbridge shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Enbridge shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Enbridge's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Other Approvals

- 4.1 Enbridge shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, shall provide a

list thereof, and shall provide copies of all such written approvals, permits, licences, and certificates upon the Board's request.

4.2 Enbridge shall comply with current CSA Z341 requirements for increasing the operating pressure of Corunna and Seckerton storage pools and shall file with the Ministry of Natural Resources an engineering study and a geological study as required by the CSA Z341.