



ONTARIO ENERGY BOARD

OEB STAFF SUBMISSION

November 18, 2015

Union Gas Limited

2016 STORAGE ENHANCEMENT PROJECT

EB-2015-0250

Introduction

Union Gas Limited (Union) applied for approval to increase the maximum operating pressures in the Bentpath East, Booth Creek, and Mandaumin natural gas storage pools (Pools) above the pressures set in the Ontario Energy Board (OEB)'s original conditions of approval (2016 Storage Enhancement Project¹). Union filed proposed wording for the condition that would replace each of the original maximum operating pressure condition in OEB orders for each of the Pools.

The Pools are located in the Townships of Dawn, Enniskillen and Plympton, and the City of Sarnia in Lambton County. The increase in operating pressure will increase the storage capacity of the Pools. Union asked for OEB's approvals by January 31, 2016 so that the increased operating pressure operation can start in the 2016 injection season.

The original condition for each of the Pools require that Union apply with the OEB if the maximum operating pressure is to be increased above the pressure set in the condition. Furthermore, the condition states that such an application by Union should be supported by geological, engineering and economic studies².

In this application, Union requested that the original condition of approval be replaced by the following condition for the Bentpath East and Booth Creek pools;

Union Gas Limited shall not operate the storage pool above a pressure representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth without leave of the Board. Union Gas Limited shall file an engineering study and geological study in support of any leave application.

For the Mandaumin pool, Union requested that the original condition of approval be replaced by the following condition:

Union Gas Limited shall not operate the storage pool above a pressure representing a pressure gradient of 16.5 kPa/m (0.73 psi/f) of depth without leave of the Board. Union Gas Limited shall file an engineering study and geological study in support of any leave application.

Process

The OEB issued a Notice of Application on September 9, 2015 (Notice). Union served and published the Notice as directed. Enbridge Gas Distribution Inc. (Enbridge) is the

¹ In 2016 injection season, Union will also increase the operating pressure in Dawn 59-85 pool. This pool is not part of this application because the original order for Dawn 59-85 pool does not have a maximum operating pressure condition. According to Union this increase complies with the CSA Z341 requirements to the satisfaction of the MNRF.

² An economic study was not required for the Benpath East pool (EB-2009-0144)

only intervenor in this proceeding. Enbridge did not actively participate in the proceeding. The OEB proceeded by way of a written hearing. In accordance with Procedural Order No. 1 issued on October 9, 2015, the interrogatory phase was completed on November 4, 2015.

OEB Staff Submission

OEB staff submits that it supports the approval of the application filed by Union for the reasons set out below.

In Ontario, the Ministry of Natural Resources and Forestry (MNRF) has the authority to ensure that storage pools are safely operated in accordance with the CSA Z341.1-14 “*Storage of Hydrocarbons in Underground Formations*” (CSA Z341). Union provided evidence that MNRF has no concerns about the geological and engineering aspects of operating the Pools at increased pressures.³

OEB staff submits that the request to vary the original conditions of approval is acceptable for the following reasons:

- (i) Union complied with the CSA Z341 requirements; and
- (ii) the costs of 2016 Storage Enhancement Project do not have negative impact on Union’s ratepayers.

Each of the above is discussed more fully below.

Compliance with CSA Z341 Requirements

As noted above Union applied for approval to increase the operating pressures in the Bentpath East and Booth Creek pools to 17.2 kPa/m (0.76 psi/ft) and the Mandaumin pool to 16.5 kPa/m (0.73 psi/ft). These operating pressures are above the operating pressures originally approved by the OEB.

In 2009 Union applied to increase the operating pressure in the Bentpath East pool (EB-2009-0144) from 15.9 kPa/m (0.70 psi/ft) to 16.5 kPa/m (0.73 psi/ft). The OEB granted the approval under the following condition of approval:

Union Gas Limited shall not operate the storage pool above a pressure representing a pressure gradient of 0.73 psi per foot of

³ Union’s response to OEB staff interrogatory # 2 includes copies of MNRF’s emails that state it has no concerns.

depth without leave of the Board. Union Gas Limited shall file an engineering study and a geological study in support of any leave application.

The OEB authorized Union to operate the Booth Creek pool (EBO 207) up to a maximum operating pressure of 15.9kPa/m and specified the following condition of approval:

Union shall not operate the Booth Creek Pool above a pressure representing a pressure gradient of 0.7 psi per ft. depth (15.9 kPa/m) without leave of the Board. Union shall support any leave application with an engineering, geological and economic study showing that greater pressures are safe and in the public interest.

The OEB authorized Union to operate the Mandaumin pool (RP-1999-0047) up to a maximum operating pressure of 15.9 kPa/m (0.70 psi/ft) and specified the following condition of approval:

Union shall not operate the Mandaumin Pool above a pressure representing a pressure gradient of 0.7 psi per ft. depth (15.9 kPa/m) without leave of the Board. Union shall support any leave application with an engineering, geological and economic study showing that greater pressures are safe and in the public interest.

The increases in the operating pressures, subject to this application, have to comply with all relevant requirements of the CSA Z341. The authority to confirm compliance with CSA Z341 is with the MNRF. Over the past several years⁴, the OEB has received and approved similar applications from both Union and Enbridge. All of these approvals were based in part on the evidence that the MNRF confirmed that the increases in the operating pressures in terms of engineering and geological impacts are acceptable and conform to the requirements of the CSA Z341.

Engineering and geological studies were completed by Geofirma Engineering and filed with the MNRF. Union stated that it provided the detailed technical engineering and geological studies to the MNRF for their expert review and determination as to whether the proposed operating pressures comply with the CSA Z341 requirements. In response to OEB staff interrogatory # 2, Union filed copies of communication from the MNRF which confirm that the MNRF reviewed the engineering and geological studies and stated that the operating pressures increases are within requirements of the CSA Z341. OEB staff however notes that the MNRF did not file a request for intervenor status in this proceeding.

⁴ The most recent approval was of Union's EB-2014-0306 application to increase operating pressure in 3 other pools in 2015 injection season.

OEB staff is of the view that the conditions of approval that are subject to this application require that Union file the actual geological and engineering studies with the OEB when seeking the leave to increase the operating pressures. OEB staff notes that Union did not file geological and engineering studies with the OEB. However, the studies were filed with the MNRF which has the authority to determine compliance with CSA Z341. The MNRF has confirmed, in an email which is on the record, that it has reviewed the studies and confirmed that the increases in operating pressure are acceptable and conform to the CSA Z341 requirements. OEB staff submits that the OEB approve the application on the condition that Union file with its reply submission the following:

- (i) A formal letter from the MNRF to Union stating that it reviewed the studies and that the MNRF has no concerns, including a statement that the 2016 Storage Enhancement Project complies with the relevant requirements of the CSA Z341.

If the OEB panel hearing this case agrees that the complete filing of geological and engineering studies is not required if there is written confirmation from the MNRF that it has reviewed them, OEB staff submits that this should be reflected in the decision. Otherwise, there will be an obligation for Union to comply with the previous condition of approval. OEB staff also submits that if the OEB panel agrees with this position, any future conditions of approval should be amended accordingly. OEB staff has proposed amended conditions of approval in the next section.

The Costs of 2016 Storage Enhancement Project do not have Negative Impact on Union's Ratepayers

Union's evidence did not include an economic study for any of the Pools. In response to OEB staff interrogatory # 1, Union stated that because the 2016 Storage Enhancement Project pertains to Union's unregulated storage, the costs will not be borne by Union's ratepayers. Union added that since the Natural Gas Electricity Interface Review (NGEIR) EB-2005-0551 Decision, Union has not been required to file cost or economic information for unregulated storage projects.

OEB staff submits that because the increased storage capacity of the Pools will serve Union's unregulated storage business, there will be no impact on Union's ratepayers.

Subject to Union's filing additional documents noted above OEB staff agrees that the original conditions of approval be replaced with the conditions wording proposed by Union and modified as follows:

For the Bentpath East and Booth Creek pools;

Union Gas Limited shall not operate the storage pool above a pressure representing a pressure gradient of 17.2 kPa/m (0.76 psi/f) of depth without

leave of the Board. Union Gas Limited shall file in support of any leave application an engineering study and geological study summary and a formal confirmation from the Ministry of Natural Resources and Forestry that operating the pool at the increased operating pressure complies with the requirements of the CSA Z341.

For the Mandaumin pool:

Union Gas Limited shall not operate the storage pool above a pressure representing a pressure gradient of 16.5 kPa/m (0.73 psi/f) of depth without leave of the Board. Union Gas Limited shall file in support of any leave application an engineering study and geological study summary and a formal confirmation from the Ministry of Natural Resources and Forestry that operating the pool at the increased operating pressure complies with the requirements of the CSA Z341.

-All of which is respectfully submitted-