



ONTARIO ENERGY BOARD

STAFF SUBMISSION

Union Gas Limited

OWEN SOUND REPLACEMENT PROJECT

EB-2012-0430

February 21, 2013

Introduction

Union Gas Limited ("Union") filed an application with the Ontario Energy Board (the "Board") on November 13, 2012 under sections 90 and 97 of the Ontario Energy Board Act, 1998, S.O. 1998, c. 15, Schedule B (the "Act"), for an order granting Union leave to construct approximately 25 kilometres ("km") of Nominal Pipe Size 12 ("NPS 12") hydrocarbon pipeline (the "Proposed Pipeline") to replace a portion of the existing Owen Sound Pipeline located in the Region of Waterloo.

The Proceeding

The Board issued a Notice of Application ("Notice") dated December 6, 2012. Union served and published the Notice as directed by the Board. The City of Kitchener ("Kitchener") requested and was granted intervenor status in this proceeding. Observer status was requested by Enbridge Gas Distribution Inc. On January 10 and 14, 2013, the Board received letters of comment from the Region of Waterloo Legal Services ("RWLS") and the Waterloo Region District School Board ("WRDSB"), respectively. Appended to WRDSB's letter of January 11, 2013 were copies of its letters of September 7, 2012 and October 23, 2012 as well as a document titled "Summary of Gas Pipeline Regulations in Ontario". WRDSB also filed a letter dated August 13, 2012 from Azimuth Environmental Consulting. In accordance with the procedural schedule, Board staff and Kitchener filed interrogatories on February 1, 2013 and Union filed interrogatory responses on February 11, 2013.

Conflict with Rosenberg Secondary Plan

In its letter of comment, WRDSB raised a concern about the proximity of the Proposed Pipeline to a planned site for a future public school to be built in the City of Kitchener. The WRDSB stated that it had been involved in the development of the Rosenberg Secondary Plan through consultations with the City of Kitchener, resulting in the designation of three public school sites in the City's Official Plan. The WRDSB indicated that the location of these sites was based on criteria that included a minimum setback distance from known gas pipelines, and other major facilities.

WRDSB stated that the Proposed Pipeline with a new section that will run down Bleams Road compromises the approved Rosenberg Secondary Plan, because one of the designated school sites would be within 100 metres of a proposed high pressure gas pipeline. WRDSB noted that recent pipeline setback standards calculated by Dr. Charles Rhodes¹ ("Rhodes Report") indicate that a minimum distance of 231 metres is necessary to ensure human safety in the event of a pipeline rupture.

WRDSB strongly objects to the Proposed Pipeline along Bleams Road unless the design for the pipeline is modified with respect to location, size and maximum operating pressure in order to meet the pipeline setback standards based on the Rhodes Formula.

In a letter dated January 28, 2013, responding to the WRDSB's concerns, Union stated that *Ontario Regulation 210/01 under the Technical Standards and Safety Act 2000, Oil and Gas Pipeline Systems* (the "Regulation") and *CSA Z662-11 Standard Oil and gas pipeline systems* (the "CSA Standard"), as amended, are the Ontario regulation and code documents governing the design, construction, operation and maintenance of natural gas pipelines and that compliance with these requirements is governed by the Technical Standards Safety Association in Ontario.

Union stated that it has reviewed the Rhodes Report and notes that the report conflicts with the Regulation and the Standard. One example Union noted was that the Rhodes Report clearly relies on the CSA Plus 663 Standard². Section 1.4 of the CSA Plus 663 Standard states that this standard is not intended to cover local natural gas distribution pipelines. Union stated that the Proposed Pipeline along Bleams Road is a distribution pipeline and not a major transmission pipeline. As such, it will operate as part of a lower pressure system (hoop stress less than 40% of the specified minimum yield strength). As a lower pressure system, there are no requirements for additional setback beyond the limit of the easement or road right of way for pipelines operating at this pressure.

¹ Attachment to Union Gas Limited, Owen Sound Pipeline Replacement Project - Impacts on Planned School Sites, January 11, 2013, WRDSB

² Plus 663, Land use planning for pipelines: A guideline for local authorities, developers, and pipeline operators

Union also stated that they operate and maintain a number of pipelines of similar size and operating pressures, within its franchise areas across Ontario, which are located at distances of less than 200 meters from schools and hospitals. This is a practice which complies with the above noted Regulation and Standard which govern the design, construction and operations of natural gas pipelines and are accepted industry practices. Union noted that there are no governing requirements for additional setback beyond the limit of the easement or road right of way for distribution pipelines.

Union stated that because there are conflicts that exist between the Rhodes Report and the statutes, regulations and codes which specifically govern the Proposed Pipeline, for the proposed replacement, Union will not be adopting the suggestions contained in the Rhodes Report.

Board Staff submissions

Board staff notes that the Regulation and Standard relied upon by Union provide as follows:

The following guidelines pertain to the installation of new steel oil and gas pipeline systems designed to operate at hoop stresses of 40% or more of the specified minimum yield strength. A 200 metre setback shall be maintained from the centerline of the pipeline to institutions where rapid evacuation may be difficult, such as hospitals, nursing homes, penal institutions, and institutions for the physically and mentally handicapped.³

Board staff submits that because Union will be operating at hoop stresses of less than 40%, there are no regulatory requirements for additional setback beyond the limit of the easement or road right of way, therefore the 200 metre setback standard does not apply.

³ Technical Standards and Safety Authority - GUIDELINES FOR LOCATING NEW OIL AND GAS PIPELINE FACILITIES, PI-98/01, August 1998,

Board staff agrees that the CSA Plus 663 Standard, referred to in the Rhodes Report and which the WRDSB submits should be applied, is intended to cover transmission pipelines⁴, not distribution pipelines⁵. The pipeline proposed by Union is NPS 12, which is 12 inches in diameter. As stated in Section 1.4 of the CSA Plus 663 Standard:

“This Guideline is not intended to cover local natural gas distribution pipelines as defined in Annex A. Distribution pipelines are an integral part of local development, as are other utilities that support development. This kind of development already involves consultation among developers, local authorities, and local distribution (pipeline) companies.”

The Proposed Pipeline is a distribution pipeline and Board staff submits that the CSA Plus 663 Standard is not applicable to the present case.

Board staff submits that Union should continue to follow the Regulation and Standard referenced above which specifically govern the Proposed Pipeline.

The Need for the Proposed Pipeline

Union stated in its Application that, since 2002, it has had an extensive pipeline maintenance and integrity management program in place that includes the regular monitoring of pipelines for corrosion, leaks or other potential damage to ensure its pipelines remain in safe operating condition. Union stated that it regularly conducts inline assessments of its pipelines using inline inspection tools to determine the condition of the pipelines. Based on the results of these assessments, Union takes appropriate mitigation action to address any integrity issues that are found.

⁴ Transmission pipelines typically range in size from 508.0 mm to 1219.2 mm (20 in to 48 in) in diameter. Transmission pipelines carry oil, natural gas, and natural gas liquids from the producing regions of the country to the marketplace.

⁵ Pipelines delivering natural gas from transmission pipelines to homes and businesses are called distribution pipeline systems. Distribution pipelines can be as large as 914.4 mm (36 in) in diameter. However, most are much smaller, ranging in size from 33.4 mm to 168.3 mm (1 in to 6 in) in diameter. These pipelines generally operate at lower pressures than the transmission pipelines and are owned and operated by local distribution companies (LDCs).

Union stated based on its experience with the Owen Sound line and given its overall condition and proximity to built-up areas, partial replacement of the pipeline was deemed the most effective action to manage and ensure the long term integrity of the pipeline. Union stated that if the Project is delayed, integrity concerns will become more serious as risks of failure increases. Union also noted that results of scheduled inspections in 2011 identified multiple integrity issues that could pose safety and security of supply concerns if not addressed.

Board staff submits that the evidence filed by Union supports the need for the Proposed Pipeline.

Project Economics

The capital cost for the Proposed Pipeline is estimated to be \$23.9 million. A breakdown of the capital costs was provided in the application.

Union stated that a Discounted Cash Flow report was not completed as the Proposed Pipeline is underpinned by the relocation requirements and there are no new contracts associated with this replacement.

Routing, Environmental Assessment, and Pipeline Design

The Proposed Pipeline will begin at Union's Owen Sound valve site located on Northumberland Road just south of Highway 401 on Lot 34, Concession 9, in the Township of North Dumfries and end at the Waterloo Gate Station on Fischer-Hallman Road in the City of Waterloo, within the Region of Waterloo.

As the majority of the pipeline between the Owen Sound valve site and the Kitchener Gate Station will be replaced for technical reasons and in the same easement, the full route selection was not completed.

Union retained the services of Azimuth Environmental Consulting Inc. to review the proposed route of the pipeline and prepare an Environmental Report ("ER"). Union

stated that they will implement a program dealing with environmental inspection. This program will ensure that the recommendations in the ER are followed.

The ER identified Species at Risk concerns along the route and Union stated that they are working with the Ministry of Natural Resources to develop mitigation practices that will ensure there will be no long term environmental impacts.

Union stated that the design specifications are in accordance with the requirements of the Regulation and the Standard.

Union stated in its Application that the ER was submitted to the Ontario Pipeline Coordinating Committee ("OPCC") on November 2, 2012. Board staff expects that Union, in its reply submissions, provide any update on comments it received in the process of the OPCC review regarding the proposed project.

Land Issues

For the majority of the pipeline between the Owen Sound Valve site and Kitchener Gate Station, Union plans to use its existing easement and associated land rights or the rights under Union's Franchise Agreement with the Region of Waterloo. Union will require temporary land rights in this section.

For the section between the Bleams Road and the Waterloo Gate Station, Union will require permanent and temporary land rights or utilize the provisions outlined in the existing franchise agreement, with the Region of Waterloo to construct the pipeline.

Union filed with the Board a Pipeline Easement Agreement that Union will offer to the affected landowners.

Conditions of Approval

Board staff filed proposed conditions of approval (attached as Appendix A to these submissions) in Interrogatory #7. Union responded that it would comply with the proposed conditions.

Conclusion

Board staff submits that the need for this project has been demonstrated by the applicant. Board staff have no outstanding concerns or issues with the application. Board staff further submits that the proposed conditions of approval be included as part of the Board's order in this matter.

Appendix A

to

Board Staff Submissions

EB-2012-0430

EB-2012-0430**Union Gas Limited
Leave to Construct Application****Board Staff Proposed Draft****Conditions of Approval****1 General Requirements**

- 1.1 Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and the evidence filed in EB-2012-0430 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, 2014, unless construction has commenced prior to that date.
- 1.3 Union shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the members of the Ontario Pipeline Coordinating Committee ("OPCC").
- 1.4 Union shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union 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.
- 1.5 Within 15 months of the final in-service date, Union 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.

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 Union 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. Union 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 Union 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 Union 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 Union 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 Union 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, Union 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. Union 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 Union'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 Easement Agreements

- 4.1 Union shall offer the form of agreement approved by the Board to each landowner, as may be required, along the route of the proposed work.

5 Other Approvals and Agreements

- 5.1 Union 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.