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**VIA Email, RESS and Courier**

February 7, 2020

Ms. Christine Long  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, Suite 2700  
Toronto, Ontario, M4P 1E4

Dear Ms. Long:

**Re: Enbridge Gas Inc. ("Enbridge Gas")  
Ontario Energy Board ("Board") File No.: EB-2017-0180  
2018 Sudbury Replacement Project ("Project")**

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On September 28, 2017 the Board issued its Decision and Order for the above noted proceeding which included, as Schedule B, several Conditions of Approval.

Per section 6. (b) in the aforementioned Decision and Order, Enbridge Gas is to provide the Board with a final monitoring report no later than fifteen months after the in-service date. Please find enclosed a copy of the Final Monitoring Report for the 2018 Sudbury Replacement project.

Please contact me if you have any questions.

Yours truly,

(Original Signed)

Alison Evans  
Advisor Rates  
Regulatory Application

**EB-2017-0180: 2018 SUDBURY  
REPLACEMENT PROJECT  
FINAL MONITORING REPORT**

**Prepared By: Enbridge Gas Inc.  
Environment  
January 2020**

# TABLE OF CONTENTS

## **EB-2017-0180: 2018 Sudbury Replacement Project Final Monitoring Report**

1.0 Introduction .....	1
2.0 Background .....	3
3.0 Potential Impacts and Mitigation .....	4
3.1 Condition 1 .....	4
3.2 Condition 3 .....	5
3.3 Condition 4 .....	5
3.4 Condition 6 .....	5
4.0 Summary .....	8

### **Table 1 – Potential Impacts and Mitigation Measures**

#### **Appendix A – Project Mapping**

#### **Appendix B – Conditions of Approval**

#### **Appendix C – Change Requests and Approvals**

#### **Appendix D – Executive Certification**

#### **Appendix E – Photograph Inventory**

## **1.0 INTRODUCTION**

This Final Monitoring Report is provided pursuant to the Ontario Energy Board (OEB) Decision and Order for the EB-2017-0180 proceeding. In that Decision and Order, the Board granted Enbridge Gas Inc., “Enbridge” (formerly Union Gas Limited, “Union”) leave to construct approximately 20 kilometres of Nominal Pipe Size (NPS) 12 natural gas pipeline in the City of Greater Sudbury. The new pipeline replaces two sections (section 2 and section 3) of NPS 10 natural gas pipeline in the City which was predominately constructed in 1958.

Section 2 is approximately 12 kilometres in length and is located between Enbridge’s Coniston Station on Garson Coniston Road and the Frood Road Station on Frood Road (near Lasalle Boulevard). Section 3 is approximately 8 kilometres in length and is located between Enbridge’s Azilda Station east of Azilda on Clarabelle Road and the Walden Station near Noront Road and Highway 55. A map of the facilities is provided in Appendix A of this report.

Enbridge used existing easements, new easements, and temporary easements during pipeline construction. Enbridge also used road allowances as per the terms and conditions established in Enbridge’s franchise agreement with the City of Greater Sudbury.

The requirements for and details of this report are outlined in the specific conditions issued by the OEB in its Decision and Order dated September 28, 2017 and as listed below. The complete Conditions of Approval (COA) can be found in Appendix B of this report. The COA addressed in this report are as follows:

### **Condition 1**

Union Gas Limited (Union Gas) shall construct the facilities and restore the land in accordance with the OEB’s Decision and Order in EB-2017-0180 and these Conditions of Approval.

### **Condition 3**

Union Gas shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

#### **Condition 4**

Union Gas shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Union Gas shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.

#### **Condition 6**

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:

- a) a post construction report, within three months of the in-service date, which shall:
  - i. provide a certification, by a senior executive of the company, of Union Gas' adherence to Condition 1;
  - ii. describe any impacts and outstanding concerns identified during construction;
  - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;
  - iv. include a log of all complaints received by Union Gas, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and
  - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licenses, and certificates required to construct, operate and maintain the proposed project.
- b) a final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
  - i. provide a certification, by a senior executive of the company, of Union Gas' adherence to Condition 3;
  - ii. describe the condition of any rehabilitated land;
  - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction;

- iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and
- v. include a log of all complaints received by Union Gas, including the date/time the complaint was received; a description of the complaint; any actions taken to address the complaint; and the rationale for taking such actions.

## **2.0 BACKGROUND**

Through Enbridge's Integrity Management Program, which involved inspections of the existing NPS 10 pipeline in 2002, 2006/2007, and 2014/2015, Enbridge determined that the pipeline was deteriorating due to corrosion and denting. It was decided that a replacement of the pipeline, rather than continuing with ongoing repairs, was a more efficient way to resolve the corrosion and denting concerns. On May 5, 2017, Enbridge applied to the OEB under section 90(1) of the Ontario Energy Board Act, 1998 for an approval of its proposal to build 20 km of NPS 12 pipeline that would replace two sections of the NPS 10 pipeline in the City of Greater Sudbury (the Project). Enbridge also stated in its application to the OEB that the proposed pipeline was the continuation of three previous OEB – approved pipeline replacement projects in the Sudbury Area and increasing the pipeline size to NPS 12 would provide capacity for future growth on the Sudbury system. The OEB granted Enbridge leave to construct the Project on September 28, 2017.

Construction was initiated on April 4, 2018 and was placed into service on October 25, 2018. Construction was completed with separate crews working on section 2 and section 3 and generally progressed with following order of operations: flagging/staking, right-of-way preparation/grading (including installations of temporary accesses across watercourses for travel along the right-of-way), excavation and removal of old pipeline, trenching, stringing of new pipeline, welding, joint coating, lowering-in, tie-ins, backfilling, and cleanup. Drilling and blasting of bedrock was also performed to excavate a trench to install the pipeline in rock, as required. Clean-up and land restoration was completed for the year on November 23, 2018.

On August 1, 2018, while constructing a section of the Sudbury pipeline across watercourse SC 27 (Tributary of Garson – Coniston Creek), Enbridge's Contractor inadvertently left submersible pumps running for an extended period of time which unfortunately dried up portions of the

watercourse leading to a number of fish being killed. As required, the incident and resulting fish kill was reported to the federal Department of Fisheries and Oceans Canada (DFO). The local Ministry of Natural Resources and Forestry and Conservation Sudbury were also notified. Subsequent to the DFO review of the incident, the DFO issued a letter (dated October 15, 2018) to Enbridge and its Contractor stating that they believe that the incident was a violation of the federal Fisheries Act. The DFO noted that the letter was issued as an “official warning” and will form part of the Company’s compliance history for future reference. No charges or fines were issued to Enbridge or its Contractor.

Enbridge, in conjunction with its Contractor, subsequently reviewed their practices and procedures concerning the pumping of water at watercourses to avoid similar incidents from occurring in the future. No other water pumping related incidents occurred during construction.

Enbridge returned to the right-of-way in spring 2019 to evaluate the success of the 2018 clean-up and restoration measures and identify any areas that required additional clean-up and restoration measures. Clean-up and restoration in 2019 was initiated on May 25<sup>th</sup> and finished on August 25<sup>th</sup>. Enbridge again returned to the right-of-way in fall 2019 to evaluate the success of clean-up and restoration measures and ensure the banks of all watercourses were stable and re-vegetated. Clean-up and restoration measures were successful and there are no outstanding concerns.

### **3.0 POTENTIAL IMPACTS AND MITIGATION**

#### **3.1 Condition 1**

*Union Gas Limited (Union Gas) shall construct the facilities and restore the land in accordance with the OEB’s Decision and Order in EB-2017-0180 and these Conditions of Approval.*

Enbridge constructed the facilities and restored the land in accordance with the OEB’s Decision and Order in the EB-2017-0180 proceeding and the Conditions of Approval.

### **3.2 Condition 3**

*Union Gas shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.*

Enbridge implemented all the recommendations of the Environmental Report filed in the proceeding and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

### **3.3 Condition 4**

*Union Gas shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Union Gas shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.*

Enbridge advised the Board of two (2) changes to OEB-approved construction or restoration procedures on February 20, 2018 (revised February 22, 2018) and April 12, 2018. Enbridge received Board approval for the change requests on March 5, 2018 and April 24, 2018, respectively. Enbridge's change requests and Board approvals are provided in Appendix C of this report.

### **3.4 Condition 6**

*Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:*

- a) a post construction report, within three months of the in-service date, which shall:*
  - i. provide a certification, by a senior executive of the company, of Union Gas' adherence to Condition 1;*
  - ii. describe any impacts and outstanding concerns identified during construction;*
  - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;*



- iv. *Include a log of all complaints received by Union Gas, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and*
- v. *provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licenses, and certificates required to construct, operate and maintain the proposed project.*

A Post Construction Report that satisfied the above conditions was completed and submitted to the Board within three months of the in-service date in January 2019.

- b) *a final monitoring report, no later than 15 months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:*
  - i. *provide a certification, by a senior executive of the company, of Union Gas' adherence to Condition 3;*

One paper copy and one electronic (searchable PDF) version of this Final Monitoring Report are being filed with the Board. This report is certified by Michelle George, Vice President of Engineering, that Enbridge has implemented all the recommendations of the Environmental Report filed in the EB-2017-0180 proceeding and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review. This is confirmed by the executive certification which is provided in Appendix D of this report.

- ii. *describe the condition of any rehabilitated land;*

All disturbed land has been returned to at least pre-construction conditions. The land that was disturbed during construction was successfully re-vegetated and no further clean-up is required. Please see Appendix E for a photo log of the restored land.

- iii. *describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction;*

In addition to the incident and subsequent mitigation measures described in section 2.0, the mitigation measures taken to address the identified impacts of construction listed in Table 1 of this report were utilized and successful.

- iv. *include the results of analyses and monitoring programs and any recommendations arising therefrom; and*

The project area was subject to an Archaeological Assessment, a Cultural Heritage Study, and a Species at Risk Study prior to construction and are described in Table 1. More specifically, the Species at Risk Study found that portions of the Project were located in Eastern Whip-poor-will and Blanding's Turtle Habitat and mitigation measures were developed to protect these species during construction. The mitigation measures were adhered to and no species were harmed during construction.

Enbridge's Well Monitoring Program was also implemented which provided the opportunity for interested landowners with water wells to have their wells sampled and analyzed prior to construction. Two water well complaints were received and are described in Table 2.

- v. *include a log of all complaints received by Union Gas, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions.*

Enbridge's Complaint Tracking System, which identifies the current status of complaints received as a result of pipeline construction, was in effect. A complaint is identified as a concern by a landowner that has not been resolved to their satisfaction within three (3) working days. Please see Table 2 for a summary of complaints.

During construction, various concerns other than those listed in Table 2 were raised to Enbridge and their Contractor. These issues were minor in nature and were dealt with by Enbridge and the Contractor in an expeditious manner.

Enbridge will continue to monitor the state of the land and will address any landowner or public concerns should they arise.

#### **4.0 SUMMARY**

This Final Monitoring Report has been prepared pursuant to the Conditions of Approval contained in the OEB Decision and Order for the EB-2017-0180 proceeding. This report provides confirmation that Enbridge implemented all the recommendations of the Environmental Report filed in the proceeding and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review. This report also confirms that Enbridge successfully rehabilitated the land disturbed from construction and there are no outstanding concerns. It is anticipated that the mitigation measures and rehabilitation efforts implemented during construction will effectively eliminate any long-term impacts to the environment.

## **Table 1**

### **Potential Impacts and Mitigation Measures**

Activity/Component	Potential Impacts/Concerns	Mitigation Measures
a) Pre-pipeline Construction	<ul style="list-style-type: none"> <li>Pipeline construction may be disruptive to landowners.</li> </ul>	<ul style="list-style-type: none"> <li>Prior to pipeline construction, the Lands Relations Agent and Construction Superintendent met with all directly affected landowners to discuss construction and identify any concerns that may need to be addressed.</li> </ul>
b) Surveying	<ul style="list-style-type: none"> <li>Surveying may be disruptive to the landowners.</li> <li>Woodlot damage.</li> </ul>	<ul style="list-style-type: none"> <li>Landowners and tenants were notified of intent to enter their property.</li> <li>All woodlot damages were settled with landowners or tenants as required.</li> </ul>
c) Access Roads	<ul style="list-style-type: none"> <li>Crossing of watercourses.</li> <li>Vehicular traffic may cause soil rutting, compaction or mixing.</li> </ul>	<ul style="list-style-type: none"> <li>Permits from Conservation Sudbury were obtained and the conditions were followed prior to construction of access roads across watercourses.</li> <li>Culverts and clear span bridges were utilized in the construction of access roads to ensure existing drainage patterns were maintained.</li> <li>Sediment fencing, erosion control matting, and vegetative covers (i.e. grasses) were used alongside watercourses to minimize run-off and erosion.</li> <li>Geotextile fabric was used for new temporary access roads to provide additional stability, minimize compaction, and minimize topsoil mixing with granular material.</li> </ul>
d) Clearing	<ul style="list-style-type: none"> <li>The removal of trees and vegetation.</li> </ul>	<ul style="list-style-type: none"> <li>Landowners were eligible for the Enbridge Tree Replacement Program.</li> <li>Tree cut from woodlots will be</li> </ul>

Activity/Component	Potential Impacts/Concerns	Mitigation Measures
		<p>replaced at a 2:1 per area basis.</p> <ul style="list-style-type: none"> <li>• The harvesting of trees was minimized as much as practical.</li> <li>• All tree clearing was done outside the migratory bird nesting season (April 1 – August 31).</li> <li>• Specification CSPL-03 was followed.</li> </ul>
e) Grading	<ul style="list-style-type: none"> <li>• Grading may be necessary for the construction of access roads or work areas. On agricultural lands, grading has the potential to impact soil productivity by disrupting tile drains and causing soil mixing, rutting and compaction, particularly during wet soil conditions.</li> </ul>	<ul style="list-style-type: none"> <li>• Grading was not conducted on wet soils.</li> <li>• Topsoil was stripped and stockpiled on the edge of the easement.</li> <li>• Topsoil stripping was monitored to ensure there was adequate separation of topsoil and subsoil.</li> <li>• No agricultural lands were impacted along the pipeline route.</li> <li>• Specification CSPL-05 was followed.</li> </ul>
f) Stringing	<ul style="list-style-type: none"> <li>• Stringing trucks may impact soil productivity due to soil compaction, rutting, and mixing.</li> </ul>	<ul style="list-style-type: none"> <li>• Specification CSPL-11 was followed.</li> </ul>
g) Trenching	<ul style="list-style-type: none"> <li>• Trenching may cause soil mixing (topsoil and subsoil mixing), which may impact soil productivity.</li> </ul>	<ul style="list-style-type: none"> <li>• Trenching followed Specification CSPL-06 and CSPL-07.</li> <li>• Prior to trenching, topsoil was separated from subsoil as per Specifications CSPL-04 and CSPL-05.</li> </ul>
h) Backfilling	<ul style="list-style-type: none"> <li>• Improper backfilling may cause topsoil/subsoil mixing.</li> </ul>	<ul style="list-style-type: none"> <li>• Specification CSPL-17 was followed.</li> </ul>
i) Hydrostatic Testing	<ul style="list-style-type: none"> <li>• Discharge of hydrostatic test water may cause erosion at the point of discharge.</li> </ul>	<ul style="list-style-type: none"> <li>• Measures were used to prevent erosion at the point of discharge.</li> <li>• A permit was secured from the Ministry of the Environment, Conservation and Parks for</li> </ul>

Activity/Component	Potential Impacts/Concerns	Mitigation Measures
		<p>hydrostatic testing and conditions were followed.</p> <ul style="list-style-type: none"> <li>• A monitoring program was undertaken to ensure that water quality had remained within acceptable parameters during testing.</li> </ul>
j) Site Restoration	<ul style="list-style-type: none"> <li>• Improper site restoration may affect soil productivity.</li> </ul>	<ul style="list-style-type: none"> <li>• Restoration followed Specification CSPL-19.</li> <li>• Disturbed areas were restored back to pre-construction conditions or better through topsoil replacement, re-grading, seeding/sodding, and erosion control where required.</li> <li>• The Lands Relations Agent has ensured and will continue to ensure that the landowners are satisfied with the restoration measures completed on their property.</li> </ul>
k) Fuel Storage and Handling	<ul style="list-style-type: none"> <li>• Improper fuel storage and handling may cause spillage and possible contamination of soil.</li> </ul>	<ul style="list-style-type: none"> <li>• Fuel was not stored near watercourses or wetlands (i.e. within 50 m).</li> <li>• Fuel was stored within impervious containment.</li> <li>• Spill clean-up material (i.e. absorbent pads) was stored on-site and available at all times.</li> </ul>
l) Liquid and Solid Waste Handling	<ul style="list-style-type: none"> <li>• Liquid waste, solid waste, and lubricants must be properly handled, stored and disposed of to avoid potential contamination of the surrounding area.</li> </ul>	<ul style="list-style-type: none"> <li>• Liquid and solid wastes were properly stored, handled, and disposed of at an approved location.</li> <li>• The area was cleared of all debris and litter during and after construction.</li> </ul>
m) Fence Removal	<ul style="list-style-type: none"> <li>• Fences were removed during construction.</li> </ul>	<ul style="list-style-type: none"> <li>• Temporary fences were erected per Specification CSPL-01 and fences were repaired to</li> </ul>

Activity/Component	Potential Impacts/Concerns	Mitigation Measures
		Specification CSPL-19.
n) Archaeology, Cultural Heritage Landscapes, and Built Heritage Resources	<ul style="list-style-type: none"> <li>Disturbance of heritage resources.</li> </ul>	<ul style="list-style-type: none"> <li>Archaeological Assessments were completed prior to construction.</li> <li>Direction was given to stop construction if an artifact was encountered and to notify the Ministry of Tourism, Culture and Sport.</li> <li>A Cultural Heritage consultant was retained to determine if impacts to cultural heritage landscapes and/or built heritage resources were anticipated and to develop a mitigation plan if required.</li> </ul>
o) Species at Risk	<ul style="list-style-type: none"> <li>Impacts to species and their habitat.</li> </ul>	<ul style="list-style-type: none"> <li>Enbridge obtained permits from the Ministry of Natural Resources and Forestry and adhered to the conditions of such permits to mitigate impacts to Blanding's Turtles and Eastern Whip-poor-wills.</li> </ul>
p) Watercourse Crossings	<ul style="list-style-type: none"> <li>Impacts to water quality, fish, and bank stabilization.</li> </ul>	<ul style="list-style-type: none"> <li>Enbridge obtained permits from Conservation Sudbury and received a Letter of Advice from Fisheries and Oceans Canada for watercourse crossings.</li> <li>Watercourses were crossed following Union's DFO-endorsed sediment control plan for Dam &amp; Pump and Union's generic sediment control plan for Horizontal Directional Drilling.</li> <li>Watercourses were restored back to pre-construction conditions or better. The banks were seeded and covered with erosion control blankets immediately after backfill to ensure bank stabilization/re-vegetation.</li> </ul>


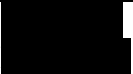


Activity/Component	Potential Impacts/Concerns	Mitigation Measures
q) Water Wells	<ul style="list-style-type: none"> <li>• Disruption to water supply.</li> </ul>	<ul style="list-style-type: none"> <li>• If water quality/quantity concerns occurred as a result of construction activities, the Company would supply potable water until the situation was corrected.</li> <li>• Enbridge implemented its standard well monitoring program.</li> </ul>
r) General Construction Work	<ul style="list-style-type: none"> <li>• Noise from the pipeline equipment and/or service vehicles may disrupt nearby residents.</li> <li>• Dust from pipeline equipment could be a disturbance to landowners and the public.</li> <li>• Pipeline equipment could damage underground utilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Noise was controlled to the greatest extent possible to minimize the disruption to nearby residents.</li> <li>• All equipment was properly muffled.</li> <li>• Municipal noise by-laws were adhered to.</li> <li>• Dust on the right-of-way was controlled with a water truck as required.</li> <li>• Locates were obtained from all utilities.</li> <li>• Any damages to utilities were repaired as soon as possible.</li> </ul>

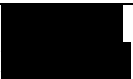
## **Table 2**

### **Complaint Tracking System**

**2018 Sudbury Replacement Project: Summary of Landowner Complaints**

<b>Date</b>	<b>Landowner</b>	<b>Complaint</b>	<b>Resolution</b>	<b>Status</b>
<ol style="list-style-type: none"> <li>1. April 18, 2018</li> <li>2. November 19, 2018</li> </ol>		<ol style="list-style-type: none"> <li>1. The landowner (LO) took issue with the amount of trees cleared from the temporary land use (TLU)/agreed-upon workspace areas.</li> <li>2. Expressed concerns again with the amount of tree clearing that took place on his property.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reviewed the previously executed documents (by the LO and Enbridge Land Agent on August 14, 2017) which identified within the documents and map the agreed upon TLU/workspace areas. Noted that Enbridge worked around some areas and they were not 100% cleared (some mature trees were spared). Enbridge remains open to discussions of compensation and tree replacement as per Enbridge's tree replacement program.</li> <li>2. Enbridge Land Agent met with the LO and Ben Van Drunen from Hollandia Land &amp; Environmental Solutions to discuss LO concerns. Ben has compiled a landscaping plan to replant appropriate size and species of trees on LO property as well as general clean up and levelling of low areas. The work is scheduled to be completed in the spring of 2020.</li> </ol>	Resolved.
<ol style="list-style-type: none"> <li>1. June 1, 2018</li> <li>2. November 19, 2018</li> </ol>		<ol style="list-style-type: none"> <li>1. Enbridge offered complimentary pre-construction well water monitoring through AECOM Canada Ltd. for</li> </ol>	<ol style="list-style-type: none"> <li>1. The LO performed a retest (collected sample himself and submitted to Testmark Laboratories), results of which showed lead to be within ODWQS</li> </ol>	Resolved.

### 2018 Sudbury Replacement Project: Summary of Landowner Complaints

Date	Landowner	Complaint	Resolution	Status
		<p>residents with water wells in close proximity to Enbridge pipeline construction. The LO was notified by AECOM that sampling results showed lead (Pb) concentration to be in excess of the limits as per Ontario Drinking Water Quality Standards, Objectives and Guidelines (ODWQS). The LO was concerned with these results and initiated a retest of his water.</p> <p>2. The LO stated that since the tree clearing was completed for the project, his well water has been disrupted (murky and no longer clear). The LO is getting the water tested by the Sudbury Health Unit.</p>	<p>guidelines). To confirm, Enbridge recommended that a second retest be performed (Testmark Laboratories to collect sample). Results from Testmark confirmed the concentration of lead to be within ODWQS guidelines. Enbridge reimbursed the landowner for all water testing expenses incurred.</p>	
<p>1. June 21, 2018</p> <p>2. November 19, 2018</p>		<p>1. Enbridge's Lands Relations Agent received a phone call from a landowner with concerns of dust drifting from the Right-of-Way (ROW) to the north and along his lawn and house.</p>	<p>1. Followed up with the Contractor and a water truck was dispatched immediately.</p>	Resolved.

**2018 Sudbury Replacement Project: Summary of Landowner Complaints**

<b>Date</b>	<b>Landowner</b>	<b>Complaint</b>	<b>Resolution</b>	<b>Status</b>
		2. The LO complained that since the work was completed, his home is full of dust and has spread throughout his house. The LO said he was promised Enbridge would take care of the expense in cleaning it up.		
August 1, 2018	[REDACTED]	Requested dust control for the ROW during the dry spell.	Followed up with the Contractor and requested water truck for the next day. The Contractor dispatched water truck, as requested.	Resolved.
August 1, 2018	[REDACTED]	A tenant requested that no access mats be left on the approved access road at the railway crossing, at the end of the rail line. In the past, a mat had to be moved by the tenant to allow train to proceed through to the off-load area for delivery of lumber.	Followed up with the Contractor and instructed no access mats were to be left on the approved access road at the railway crossing, at any time.	Resolved.
September 10, 2018	[REDACTED]	Enbridge's Lands Relations Agent received an email expressing concerns that "a berm of rock" was left behind on the footpath over the ROW and believed this to be a safety	Arranged for a site meeting the same morning with the Complainant, the Enbridge Lands Relations Agent, and a Contractor Representative to identify the area of concern.	Resolved.

**2018 Sudbury Replacement Project: Summary of Landowner Complaints**

<b>Date</b>	<b>Landowner</b>	<b>Complaint</b>	<b>Resolution</b>	<b>Status</b>
		concern. It was requested that the "berm" be leveled.	The "berm" was identified as a raised graveled footpath, which was a temporary restoration to provide pedestrian access across the ROW. The Contractor returned that afternoon and resurfaced the footpath with a smaller grade of gravel to the Superintendent's satisfaction.	
September 26, 2018	[REDACTED]	The City of Sudbury received a complaint from a local resident regarding the temporary relocation of waste bins from the ROW to an area closer to this resident's property. These bins were contracted directly by the landowner to service tenants of a housing complex.	The Contractor prioritized restoration of bin containment area during the week of October 1, 2018 to expedite the return of bins to original location. The landowner worked with Waste Management to schedule return of bins when bin containment area was restored.	Resolved.
November 19, 2018	[REDACTED]	The landowner said that per the contract between Enbridge and himself, he was supposed to receive a monthly stipend from the time his property was disrupted by tree clearing until the status quo on his property was restored, but it was suspended.	Additional 5 months or \$5,000.00 was given to the LO for compensation. LO will not receive any additional funds for landscaping work to fix his concerns in the spring.	Resolved.
March 11, 2019	[REDACTED]	The landowners said a loss in yield from their existing well	Aecom was retained by Enbridge to investigate the well interference	Resolved.

**2018 Sudbury Replacement Project: Summary of Landowner Complaints**

Date	Landowner	Complaint	Resolution	Status
		<p>supply initially was experienced in June 2018 and has persisted since that time, which they attribute to rock blasting activities occurring as part of the Project in the vicinity of their property.</p>	<p>complaint and met with the LO onsite on March 27, 2019 (appointment based on LO availability) to investigate the complaint and perform the following tasks:</p> <ul style="list-style-type: none"> <li>a) Interview the landowner regarding the reported well interference issues(s);</li> <li>b) Collection of digital photographs, measurements and written notes/observations regarding pertinent site features (e.g. water well, treatment equipment, local geologic environs, etc.); and,</li> <li>c) Collection of both a raw and treated groundwater sample for laboratory quality analysis.</li> </ul> <p>Aecom determined that the well supply (quantity) issue reported by the property owners is not as a result of project construction and the well yield decline appeared to be more-likely related to local aquifer and/or local water system issues versus an area-wide impact to the local groundwater regime.</p> <p>As part of the investigation, the blasting contractor, DST Consulting</p>	

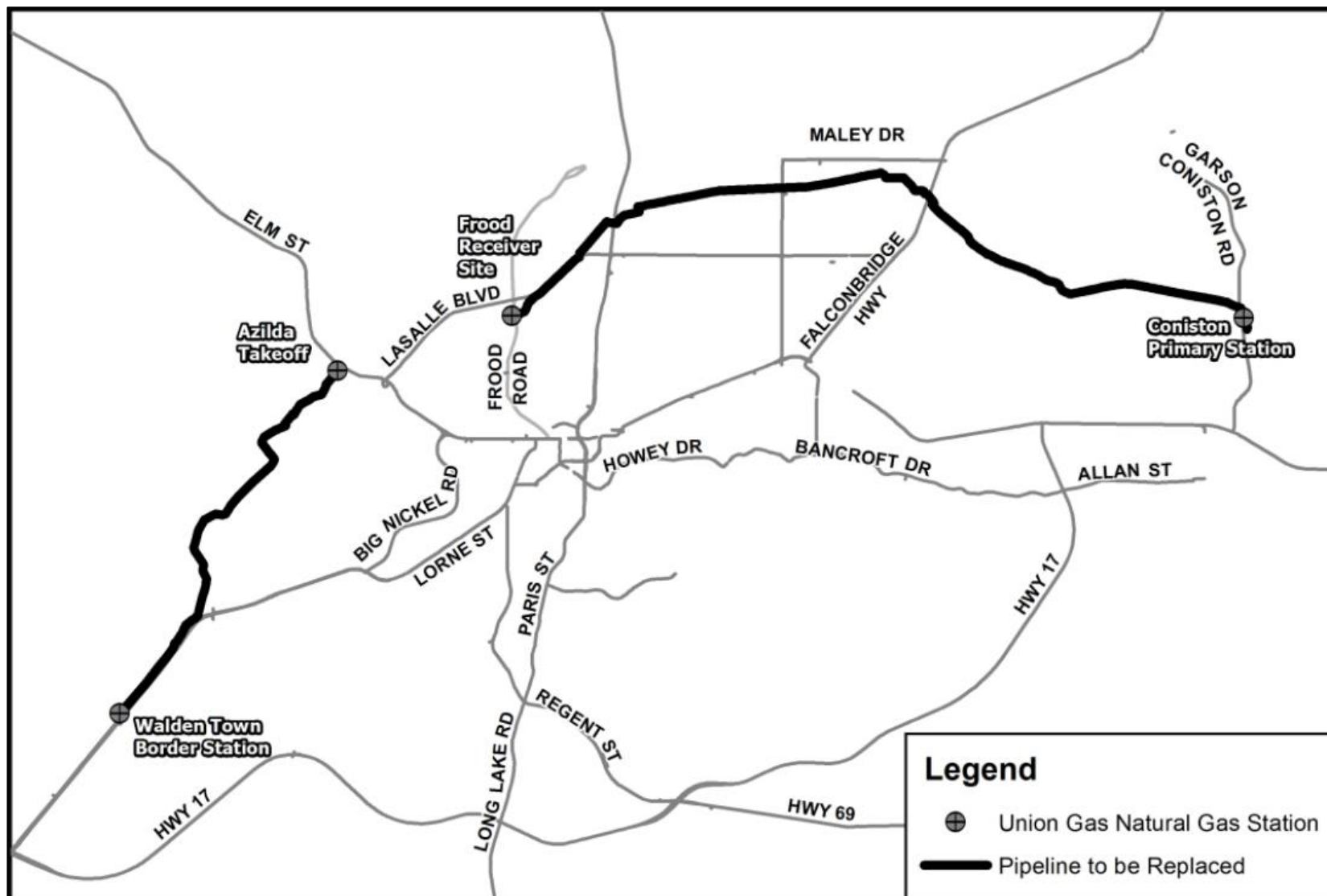
2018 Sudbury Replacement Project: Summary of Landowner Complaints				
Date	Landowner	Complaint	Resolution	Status
			Engineers Inc. (DST), reviewed their vibration monitoring results from rock blasting in reference to the water well. DST concluded that vibrations from trench blasting operations could not affect water levels that far (52 m deep) below the surface.	
July 2, 2019		<p>Since the spring of 2019 (i.e., following snowmelt), periodic increases in sediment and requirements for more frequent filter cartridge replacement have been attributed by the landowner to individual precipitation events. Specifically, during periods of heavy rainfall the filter cartridges have reportedly required changing on up to a daily basis.</p>	<p>Enbridge retained Aecom to provide hydrogeological services and investigate the water well complaint to determine if project activities caused the reported water well impacts. Aecom met with the LO on July 10, 2019 to investigate the complaint and perform the following tasks:</p> <ul style="list-style-type: none"> <li>d) Interview the landowner regarding the reported well interference issues(s);</li> <li>e) Collection of digital photographs, measurements and written notes/observations regarding pertinent site features (e.g. water well, treatment equipment, local geologic environs, etc.); and,</li> <li>f) Collection of both a raw and treated groundwater sample for laboratory quality analysis.</li> </ul> <p>Aecom determined that the well water quality (sediment) issue reported by</p>	Resolved.



2018 Sudbury Replacement Project: Summary of Landowner Complaints				
Date	Landowner	Complaint	Resolution	Status
			<p>the LO is not as a result of project construction, and it appears to be a local issue with regard to well condition/ configuration (i.e. missing/ failed annular seal) versus an area-wide impact to the local groundwater regime.</p> <p>As part of the investigation, the blasting contractor, DST Consulting Engineers Inc. (DST), reviewed their vibration monitoring results from rock blasting in reference to the water well. DST concluded that vibration intensities induced by the shallow trench blasting on the project could not have reached the level to cause any damage to the subject water-well.</p>	

# **Appendix A**

## **Project Mapping**



## Union Gas Limited, Sudbury Replacement Project

Source base mapping: Land Information Ontario (MNRF)



## **Appendix B**

### **Conditions of Approval**

**Leave to Construct Conditions of Approval**

**Union Gas Limited**

**EB-2017-0180**

1. Union Gas Limited (Union Gas) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2017-0180 and these Conditions of Approval.
2. (a) Authorization for leave to construct shall terminate 12 months after the decision is issued, unless construction has commenced prior to that date.  
  
(b) Union Gas shall give the OEB notice in writing:
  - i. of the commencement of construction, at least ten days prior to the date construction commences;
  - ii. of the planned in-service date, at least ten days prior to the date the facilities go into service;
  - iii. of the date on which construction was completed, no later than 10 days following the completion of construction; and
  - iv. of the in-service date, no later than 10 days after the facilities go into service.
3. Union Gas shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.
4. Union Gas shall advise the OEB of any proposed change to OEB-approved construction or restoration procedures. Except in an emergency, Union Gas shall not make any such change without prior notice to and written approval of the OEB. In the event of an emergency, the OEB shall be informed immediately after the fact.
5. Union Gas shall file, in the proceeding where the actual capital costs of the project are proposed to be included in rate base, a Post Construction Financial Report, which shall indicate the actual capital costs of the project and shall provide an explanation for any significant variances from the cost estimates filed in this proceeding.

6. Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic (searchable PDF) version of each of the following reports:
  - a) A post construction report, within three months of the in-service date, which shall:
    - i. provide a certification, by a senior executive of the company, of Union Gas' adherence to Condition 1;
    - ii. describe any impacts and outstanding concerns identified during construction;
    - iii. describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;
    - iv. include a log of all complaints received by Union Gas, including the date/time the complaint was received, a description of the complaint, any actions taken to address the complaint, the rationale for taking such actions; and
    - v. provide a certification, by a senior executive of the company, that the company has obtained all other approvals, permits, licenses, and certificates required to construct, operate and maintain the proposed project.
  - b) A final monitoring report, no later than fifteen months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
    - i. provide a certification, by a senior executive of the company, of Union Gas' adherence to Condition 3;
    - ii. describe the condition of any rehabilitated land;
    - iii. describe the effectiveness of any actions taken to prevent or mitigate any identified impacts of construction;
    - iv. include the results of analyses and monitoring programs and any recommendations arising therefrom; and
    - v. include a log of all complaints received by Union Gas, including the date/time the complaint was received; a description of the complaint; any actions taken to address the complaint; and the rationale for taking such actions.

## **Appendix C**

### **Change Requests and Approvals**



February 20, 2018

**RESS and Courier**

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4

Dear Ms. Walli,

**Re: Union Gas Limited (“Union”)  
2018 Sudbury Replacement Project  
Board File # EB-2017-0180**

Please find attached Change Request 1, for the above-noted project.

Union believes that this change is not significant and would appreciate your timely review and approval of this request, as construction is in progress.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-5457.

Sincerely,

*[original signed by]*

W. T. (Bill) Wachsmuth, RPF  
Senior Administrator, Regulatory Projects

cc: Nancy Marconi, OEB  
Zora Crnojacki, OEB



## REQUEST TO VARY

**Project Name:** 2018 Sudbury Replacement Project

**OEB File Number:** EB-2017-0180

**Change Request:** 1

### **Description and Rationale for Change**

Union is proposing changes to the dimensions and locations of permanent easements and temporary land use areas ("Land Rights"), and requests for additional Land Rights, at various locations along the pipeline route to facilitate pipeline construction. Since Union filed its original evidence additional Engineering and Environmental work has been completed for this Project. This additional work has resulted in changes to the land rights required to construct the Proposed Facilities. These changes are generally minor in nature and have been discussed with the directly affected landowners and agencies that have not identified any issues with the proposed changes.

### **Construction and Restoration Practices**

Construction and restoration of the Proposed Facilities will be completed following Union's standard practices.

### **Environmental**

Union will follow its standard environmental mitigation measures.

### **Consultation**

Union has met with the directly affected landowners and agencies and they have not identified issues or concerns.

### **Lands**

Union has discussed the proposed changes with all of the directly affected landowners. No landowners have identified any issues with the proposed changes.

### **Costs**

There will be no increase in project costs as a result of these changes.

For permanent land rights there were both additional lands rights required and some land rights that Union expected to acquire, that during this review it was determined that they were not required. These additions and subtractions resulted in no additional costs for permanent land rights.

For this project Union's temporary land compensation package was based on use of the property not the actual area to be used on the property, therefore there were no additional costs.

### **Schedule**

These changes will not result in any change to the project in-services date.

### **Attachments**

A chart setting out the changes in land rights, which are identified in red is attached at Schedule 1.

Maps showing the location of the permanent easements, which are identified as red cross-hatched areas, and temporary land rights which are identified in solid red, are attached at Schedule 2. The top half of each individual map identifies the land rights previously included in Union's application, as Schedule 9, and the bottom half of each map identifies the additional Land Rights requested.



February 22, 2018

**RESS and Courier**

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4

Dear Ms. Walli,

**Re: Union Gas Limited ("Union")  
2018 Sudbury Replacement Project  
Board File # EB-2017-0180**

Please find attached the revised Change Request 1 for the above-noted project. This includes a revised request to vary, unchanged Schedule 1 and a revised Schedule 2.

Union believes that these changes in the land rights required to construct the project are not significant and would appreciate your timely review and approval of this request.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-5457.

Sincerely,

*[original signed by]*

W. T. (Bill) Wachsmuth, RPF  
Senior Administrator, Regulatory Projects

cc: Nancy Marconi, OEB  
Zora Cmojacki, OEB

## REQUEST TO VARY

**Project Name:** 2018 Sudbury Replacement Project

**OEB File Number:** EB-2017-0180

**Change Request:** 1

### Description and Rationale for Change

Union is proposing changes to the dimensions and locations of permanent easements and temporary land use areas ("Land Rights"), and requests for additional Land Rights, at various locations along the pipeline route to facilitate pipeline construction. Since Union filed its original evidence additional Engineering and Environmental work has been completed for this Project. This additional work has resulted in changes to the land rights required to construct the Proposed Facilities. These changes are generally minor in nature and have been discussed with the directly affected landowners and agencies that have not identified any issues with the proposed changes.

### Construction and Restoration Practices

Construction and restoration of the Proposed Facilities will be completed following Union's standard practices.

### Environmental

Union will follow its standard environmental mitigation measures.

### Consultation

Union has met with the directly affected landowners and agencies and they have not identified issues or concerns.

### Lands

Union has discussed the proposed changes with all of the directly affected landowners. No landowners have identified any issues with the proposed changes.

### Costs

There will be no increase in project costs as a result of these changes.

For permanent land rights there were both additional lands rights required and some land rights that Union expected to acquire, that during this review it was determined that they were not required. These additions and subtractions resulted in no additional costs for permanent land rights.

For this project Union's temporary land compensation package was based on use of the property not the actual area to be used on the property, therefore there were no additional costs.

### Schedule

These changes will not result in any change to the project in-services date.

### Attachments

A chart setting out the changes in land rights, which are identified in **Red** in the attached Schedule 1.

Maps showing the New Proposed Temporary Land Use locations are identified **Orange** in the attached Schedule 2. These drawings were included in the pre-filed evidence at Schedule 9.

Ontario Energy  
Board  
P.O. Box 2319  
27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto ON M4P 1E4  
Telephone: 416-481-1967  
Facsimile: 416-440-7656  
Toll free: 1-888-632-6273

Commission de l'énergie  
de l'Ontario  
C.P. 2319  
27<sup>e</sup> étage  
2300, rue Yonge  
Toronto ON M4P 1E4  
Téléphone: 416-481-1967  
Télécopieur: 416-440-7656  
Numéro sans frais: 1-888-632-6273



**BY E-MAIL**

March 5, 2018

Union Gas Limited  
Bill Wachsmuth  
Senior Administrator, Regulatory Projects  
50 Keil Drive North  
P.O. Box 2001  
Chatham ON N7M 5M1  
[bwachsmuth@uniongas.com](mailto:bwachsmuth@uniongas.com)

Dear Mr. Wachsmuth:

**Re: Union Gas Limited  
EB-2017-0180 Sudbury Replacement Project  
Request to Vary / Change Request No. 1**

The Ontario Energy Board (OEB) is in receipt of your letter dated February 22, 2018, in which Union Gas Limited (Union Gas) requests a variance to the OEB approved Sudbury Replacement Project (Project). In particular, this change request (Change Request 1) pertains to changes in permanent land and temporary land use requirements related to that portion of the project described in the Project application.

Union Gas submits that as a result of additional engineering and environmental work since the Project application was filed, it requires changes to the dimensions and locations of certain permanent and temporary land use areas as described in Change Request 1. Union Gas submits that the proposed changes do not affect any additional landowners beyond those previously identified in its application, that it has consulted the affected landowners and agencies about the proposed changes, and that no issues have been identified. Union Gas submits that this change will not modify the Project's originally proposed construction or restoration practices, environmental mitigation measures, capital costs or project schedule.

As the Manager, Applications Supply and Infrastructure, I have been delegated the authority of the OEB under section 6 of the Ontario Energy Board Act, 1998 to determine whether Union's proposal will result in material changes to the leave to

construct granted by the OEB in the EB-2017-0180 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

Based on my review of the information provided, I find that the described changes do not materially impact the leave granted by the OEB. I hereby approve the proposed change.

Yours truly,

*Original signed by*

Nancy Marconi  
Manager, Applications Supply and Infrastructure

April 12, 2018

RESS

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4

Dear Ms. Walli,

**Re: Union Gas Limited ("Union")  
2018 Sudbury Replacement Project  
Board File EB-2017-0180**

Please find attached the revised Change Request 2 for the above-noted project.

Union believes that this change in the temporary land rights required to construct the project are not significant and would appreciate your timely review and approval of this request.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-5457.

Sincerely,

*[original signed by]*

W. T. (Bill) Wachsmuth, RPF  
Senior Administrator, Regulatory Projects

cc: Nancy Marconi, OEB  
Zora Crnojacki, OEB  
Ritchie Murray, OEB



## **REQUEST TO VARY**

**Project Name:** 2018 Sudbury Replacement Project

**OEB File Number:** EB-2017-0180

**Change Request:** 2

### **Description and Rationale for Change**

Union is proposing changes to the dimensions and locations of temporary land use areas adjacent to Hydro One's Martendale Transmission Station. Hydro One requested Union move a temporary land use area west as it is proposing some construction activities within the Martendale Transmission Station. This change is minor in nature and is to accommodate a request from the directly affected landowner Hydro One.

### **Construction and Restoration Practices**

Construction and restoration of the Proposed Facilities will be completed following Union's standard practices.

### **Environmental**

Union will follow its standard environmental mitigation measures.

### **Consultation**

This change only affects Hydro One lands and the change is a result of a request from Hydro One.

### **Lands**

Hydro One has approved the proposed change.

### **Costs**

There will be no increase in project costs as a result of this change.

### **Schedule**

This change will not result in any change to the project in-services date.

### **Attachments**

Schedule 1 shows the original location of the temporary lands adjacent to the Martendale Transmission Station.

Schedule 2 shows the proposed location of the temporary land rights adjacent to the Martendale Transmission Station.

Ontario Energy Board  
P.O. Box 2319  
27<sup>th</sup> Floor  
2300 Yonge Street  
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**BY E-MAIL**

April 24, 2018

Union Gas Limited  
Bill Wachsmuth  
Senior Administrator, Regulatory Projects  
50 Keil Drive North  
P.O. Box 2001  
Chatham ON N7M 5M1  
[bwachsmuth@uniongas.com](mailto:bwachsmuth@uniongas.com)

Dear Mr. Wachsmuth:

**Re: Union Gas Limited  
EB-2017-0180 Sudbury Replacement Project  
Request to Vary / Change Request No. 2**

The Ontario Energy Board (OEB) is in receipt of your letter dated April 12, 2018, in which Union Gas Limited (Union Gas) requests a variance to the OEB approved Sudbury Replacement Project (Project). In particular, this change request (Change Request 2) pertains to the dimensions and locations of certain temporary land use areas.

Union Gas submits that Hydro One has requested that Union Gas move a particular existing temporary land use area (Part 3) that is adjacent to Hydro One's Martendale Transmission Station. The reason for the request is that Hydro One is proposing construction activities within the station. In response to the request, Union Gas has proposed to move the particular temporary working area approximately 40 meters west while at the same time slightly modifying the size of two other working areas (Parts 2 and 4). Union Gas submits that the existing and proposed land use areas are on land owned by Hydro One, that Hydro One is the only landowner affected by the proposed change, and that Hydro One has approved Union Gas' proposed change.

Union Gas submits that this change will not modify the Project's originally proposed construction or restoration practices, environmental mitigation measures, capital costs or project schedule.



As the Manager, Applications Supply and Infrastructure, I have been delegated the authority of the OEB under section 6 of the Ontario Energy Board Act, 1998 to determine whether Union's proposal will result in material changes to the leave to construct granted by the OEB in the EB-2017-0180 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

Based on my review of the information provided, I find that the described changes do not materially impact the leave granted by the OEB. I hereby approve the proposed change.

Yours truly,

*Original Signed by*

Nancy Marconi  
Manager, Applications Supply and Infrastructure

## **Appendix D**

### **Executive Certification**



2018 Sudbury Replacement Project

EB-2017-0180

Decision and Order

September 28, 2017

I hereby certify that Enbridge Gas Inc. implemented all the recommendations of the Environmental Report filed in the EB-2017-0180 proceeding and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

Jan 14, 2020

Date

Michelle Coag

Senior Executive

Condition 6 (b) (i)

6. Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file with the OEB one paper copy and one electronic copy (searchable PDF) version of each of the following reports:
  - b) a final monitoring report, no later than 15 months after the in-service date, or, where the deadline falls between December 1 and May 31, the following June 1, which shall:
    - i. provide a certification, by a senior executive of the company, of Union Gas' adherence to Condition 3;

Condition 3

Union Gas shall implement all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review.

# **Appendix E**

## **Photograph Inventory**



1. The pipeline right-of-way was fully restored and re-vegetated.



2. All watercourse banks are stable and vegetated.





3. All watercourses were restored back to at least pre-construction conditions.



4. All fences and walking trails were restored and improved where possible.





5. Natural areas were heavily vegetated in 2019.



6. Wetlands along the right-of-way were fully restored and had aquatic vegetation growing in 2019.