



March 7, 2013

Mr. Neil McKay, Manager, Natural Gas Applications Ontario Energy Board Suite 2700, 2300 Yonge Street Toronto, Ontario M4P 1E4

Dear Mr. McKay:

Re: **Union Gas Limited**

> **London Reinforcement Project** Board File # EB-2010-0381

Pursuant to Condition 1.5 of the Board's Conditions of Approval for the above-noted project, please find enclosed Union's Post Construction Financial Report. In addition and further to Condition 3.1 please four copies of Union's Final Monitoring Report.

Sincerely,

Mary Jane Patrick

Administrative Analyst, Regulatory Projects

Encl.

cc:

Z. Crnojacki (Chair, OPCC)

Anna Meyer

POST-CONSTRUCTION FINANCIAL REPORT London Reinforcement

In compliance with the Ontario Energy Board Order, the following is a report on the capital pipeline costs for the London Reinforcement project.

The total project was \$2.225M or 95% higher than the estimated costs. The following explains the significant variances:

- 1. Pipe costs were \$153K or 48% higher than estimated. \$84K of this cost is because the grade of NPS 8 pipe forecasted was not available at the time of order. A higher grade of pipe was substituted. Additionally, NPS 12 pipe was not included in the Schedule 12; the cost of the NPS 12 pipe was \$69K.
- 2. Micellaneous labour costs were \$159K or 88% higher than estimated. Construction began later than scheduled, resulting in a compressed schedule and limiting inspection availability. Additional legal counsel and intervenor costs accounted for \$71K.
- 3. Contractor labour was \$1.95M or 130% higher than estimated due to the late construction window and significant scope changes, including running line changes requested by the County of Middlesex. In particular, the running line provided by the County necessitated the length of pipe installed by directional drilling to be six times greater than planned, slowing construction and leading to additional costs.
- 4. Easements, Lands & Damages costs were \$89K or 296% higher than estimated. This is predominantly due to the cost of acquiring additional easements to address the concerns raised by Middlesex County, which totalled \$69K.
- 5. IDC was not incurred as the construction was complete within 12 months.

Description	As Filed in EB-2010-0381 Sch 12	Actual Costs	\$ Variance	% Variance
Pipe (1)	320,915	474,074	153,159	48%
Valves/Test Head Assembly, Misc Material	31,686	51,931	20,245	64%
Total Material	352,601	526,005	173,404	49%
Company Labour (2)	137,500	129,715	(7,785)	(6%)
Misc Labour (X-Ray, Survey, Inspection, Legal, Reg)	181,500	340,956	159,456	88%
Contractor Labour	1,497,328	3,445,193	1,947,865	130%
Easements, Lands & Damages	30,000	118,736	88,736	296%
Total Construction and Labour	1,846,328	4,034,600	2,188,272	119%
Contingency	-	-	-	-
IDC	136,349	-	(136,349)	(100%)
Total Project	2,335,278	4,560,605	2,225,327	95%

⁽¹⁾ Includes warehouse loadings

⁽²⁾ Inlcudes labour loadings & employee expenses

LONDON NORTH REINFORCEMENT PROJECT FINAL MONITORING REPORT

Prepared by: Union Gas Limited Environmental Planning February 2013

TABLE OF CONTENTS

London North Reinforcement Project Final Monitoring Report

		Page No.
1.0	Introduction	1
2.0	Background	3
3.0	Potential Impacts and Mitigation	3
3.2 3.3 3.4 3.5 3.6 4.0	Condition 1.1) Condition 1.3) Condition 1.4) Condition 2.4) Condition 3.1) 3.1.1 Report Circulation 3.1.2 Landowner Concerns Condition 3.3) 3.2.1 Monitoring Programs Condition 4.1) Condition 5.1)	3 4 4 4 5 5 5 5 6 6
6.0	Summary	6
API	PENDIX A Location Map	
API	PENDIX B Conditions of Approval	

1.0 INTRODUCTION

This Final Monitoring Report is provided in compliance with the Ontario Energy Board ("Board") Order EB-2010-0381 granting Union Gas Limited ("Union") "Leave to Construct" approximately 6.6 km of Nominal Pipe Size (NPS) 8 inch and 0.6 kilometres of NPS 12 inch diameter natural gas pipeline in the City of London, and the Municipality of Middlesex Centre, County of Middlesex.

The pipeline commenced at Union's existing NPS 8 inch pipeline located at the corner of Tenth Line road and Wonderland Road North. The pipeline traveled southward on the east side of Wonderland Rd. and tied into a new regulating station on the west side of Wonderland Road approximately 600 metres north of Fanshawe Park Road. The NPS 12 inch commences at the station and travels south on the west side of Wonderland Road to an existing NPS 10 inch steel pipeline at Fanshawe Park Road. A map of the pipeline route is included in Appendix A.

The requirements for and details of this report are outlined in the specific conditions issued by the Board in its Order dated July 13, 2011 as listed below. The Conditions of Approval can be found in Appendix B.

Accordingly, the purpose of this Final Monitoring Report is to fulfill these conditions.

1.0 <u>Condition 1.1</u>

Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2010-0381 except as modified by this Order and these Conditions of Approval.

Condition 1.3

Union Gas 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.

Condition 1.4

Union Gas 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.

2.0 <u>Condition 2.4</u>

Union Gas 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.

3.0 <u>Condition 3.1</u>

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file four copies of both an interim and 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 Gas 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.

Condition 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.

4.0 <u>Condition 4.1</u>

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

5.0 <u>Condition 5.1</u>

Union Gas 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 approval, permit, licences, and certificates upon the Board's request.

2.0 BACKGROUND

Union was granted approval to construct the London North Reinforcement Project on July 13, 2011. Construction was initiated on August 8, 2011 with the pipeline placed into service on December 8, 2011 and cleanup for the year completed on December 6, 2011. Construction progressed from the existing facilities at Fanshawe Road in a northerly direction with the following order of operations: stringing, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins, backfilling, testing and clean-up.

Union returned to the right-of-way in May 2012 to complete the following activities: repair any subsidence on the right-of-way, perform a general overview of the right-of-way, tile repair and complete any additional clean-up that may be required.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 *Condition 1.1*

Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2010-0381 except as modified by this Order and these Conditions of Approval.

Union has complied with all conditions imposed by the Board during construction of the pipeline and has restored the land according to the evidence in support of its application.

3.2 *Condition 1.3*

Except as modified by this Order, Union Gas shall implement all the recommendations of The Environmental Study Report filed in the pre filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review.

Union has implemented all recommendations and mitigation measures outlined in the Environmental Study Report (ER) along with all directives identified by the OPCC.

3.3 *Condition 1.4*

Union Gas shall advise the Board's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union Gas 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.

There were no changes to construction or restoration procedures during this project.

3.4 *Condition 2.4*

Union Gas 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.

This Final Monitoring Report as well as the previously filed Interim Monitoring Report shall confirm that the work has been performed according to the Board's Order.

3.5 *Condition 3.1*

Both during and after construction, Union Gas shall monitor the impacts of construction, and shall file four copies of both an interim and 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 eighteen months of the in-service date. Union Gas 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.

3.1.1 Report Circulation

Four (4) copies of this Interim Monitoring Report are provided to the Board.

3.1.2 Landowner Concerns

Union's complaint tracking system, which identifies the current status of landowner complaints received as a result of pipeline construction, was/is in effect. A complaint is identified as a concern raised by a landowner, which has not been resolved to the landowner's satisfaction within three (3) working days. There were no complaints entered into the complaint tracking system.

During construction, issues that were minor in nature were raised to Union and their contractor. These were dealt with by Union or the Contractor in an expeditious manner. To date there has been no complaints entered into the complaint tracking system. Union will continue to monitor the state of the land and environment and will address any additional landowner concerns, if they should arise.

3.6 *Condition 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.

The entire right of way and in particular areas in close proximity to the watercourses were checked for stability, subsidence and vegetation re-establishment in May 2012. Additional top dressing and seeding was necessary in some areas of disturbance to ensure proper vegetation establishment.

3.3.1 Monitoring Programs

The previously filed Interim Monitoring Report provides a description of the successfully completed monitoring programs (Archaeology, Watercourse) undertaken prior to, during and following construction to monitor the effects of construction.

4.0 *Condition* **4.1**

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

All landowners affected by construction have received the same easement agreement as approved by the Board.

5.0 *Condition 5.1*

Union Gas 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 approval, permit, licences, and certificates upon the Board's request.

Union Gas obtained the following environmental permits for construction:

Upper Thames River Conservation Authority - Watercourse Crossings

- For Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Ontario Regulation 148/06.
 - Application for Permission Permit No. 47/11

6.0 **SUMMARY**

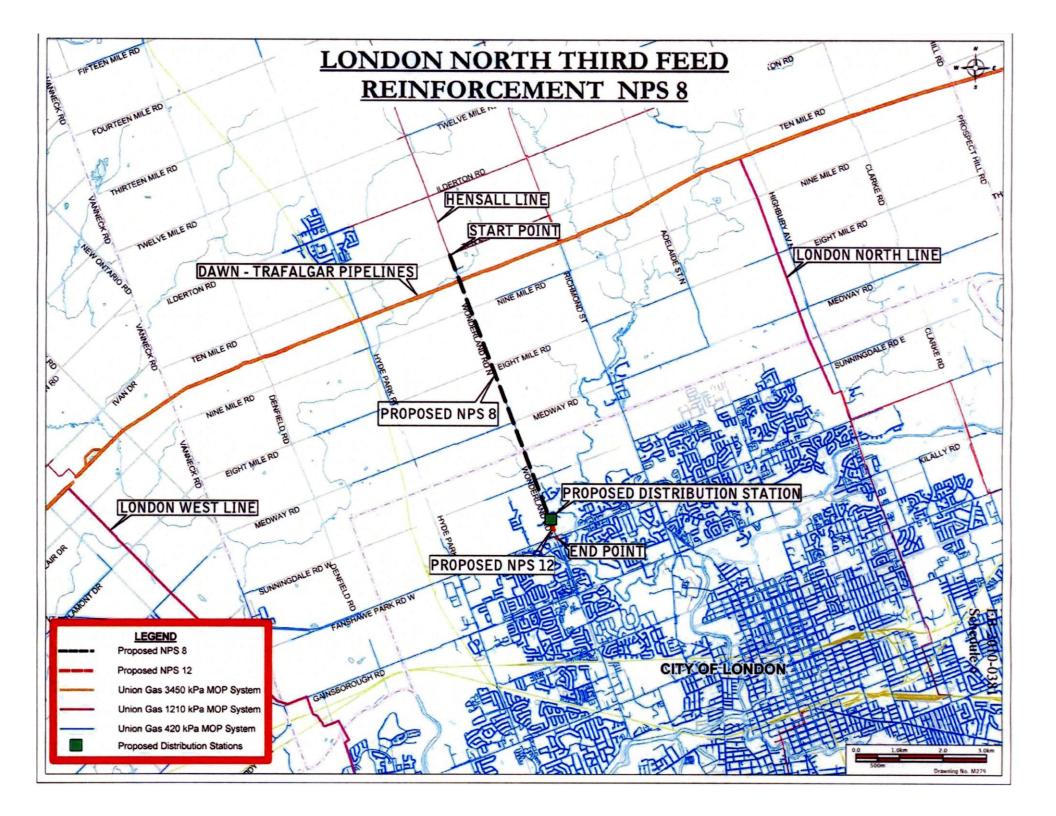
This Final Monitoring Report has been prepared as per conditions in the Board Order EB-2010-0381. The report provides an outline of Unions' compliance with the commitments of its witnesses, the measures implemented during construction to minimize disturbance to the environment and a description of Unions' monitoring programs. It is anticipated that these measures have effectively eliminate any long-term impacts to the environment.

Appendix A

Location Map

GENERAL LOCATION MAP LONDON NORTH REINFORCEMENT PROJECT





Appendix BConditions of Approval

EB-2010-0381

UNION GAS LIMITED LEAVE TO CONSTRUCT APPLICATION

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-2010-0381 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 by December 31, 2012, 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 Ontario Pipeline Coordinating Committee ("OPCC") review.
- 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:
 - a) the actual capital costs of the project and an explanation for any significant variances from the estimates filed in this 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 file with the Board's designated representative notice of the date on 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.