

By RESS & Courier

February 9, 2017

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

Dear Ms. Walli:

**Re: Union Gas Limited
Panhandle NPS 16 Replacement (Lakeshore) Project
Board File # EB-2013-0420**

Pursuant to Condition 3.2 and 4.1 of the Board's Conditions of Approval for the above-noted project, please find attached Union's Interim Monitoring Report.

Sincerely,

[original signed by]

Shelley Bechard
Administrative Analyst, Regulatory Projects
Encl.

cc: Zora Crnojacki
Nancy Marconi
Regulatory Library

PANHANDLE REPLACEMENT (LAKESHORE) PROJECT INTERIM MONITORING REPORT

BOARD ORDER EB-2013-0420

Prepared by: Union Gas Limited
Environmental Planning
February 2017

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Interim Monitoring Report

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1.0 INTRODUCTION

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2013-0420 granting Union Gas Limited (“Union”) “Leave to Construct” approximately 13 kilometres of Nominal Pipe Size (NPS) 20 inch diameter natural gas pipeline in the Town of Lakeshore in the County of Essex.

Union did not complete the entire project in 2014 separating the project into 3 phases to better balance the construction and costs over a three year period. Phase 1 which was completed in 2014 replaced the pipeline between East Puce River Road and Golfview Drive for a distance of approximately 11 kilometres. Phase 2 completed in 2015 included the pipeline section between West Puce Road and Golfview Drive. Phase 3 completed in 2016 consisted of the remaining section from East Puce River Road to west of West Puce River Road which included the crossing of the Puce River. 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 March 28, 2013 as listed below. The Conditions of Approval can be found in Appendix B.

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

1.0 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-2013-0420 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 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.

3.0 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 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 3.2

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.

4.0 Condition 4.1

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.

2.0 BACKGROUND

Phase 1

Union was granted approval to construct the NPS 16 Panhandle Replacement Project on March 28, 2013. Construction was initiated for Phase 1 on June 18, 2014 with the pipeline placed into service on September 23, 2014 and cleanup for the year completed on November 14, 2014. Construction progressed from East Puce River Road in a westerly direction to Golfview Drive with the following order of operations: topsoil removal, stringing, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins, backfilling, testing, clean-up and post construction tiling.

Union returned to the right-of-way of Phase 1 in spring 2015 to complete the following activities: post construction tiling, repair any subsidence on the right-of-way, ensure there is adequate stability and re-vegetation on all watercourse crossings, perform a general overview of the right-of-way and complete any additional clean-up that may be required.

Phase 2

Construction was initiated for Phase 2 on August 3, 2015 with the pipeline placed into service on November 18, 2015 and cleanup for the year completed on November 30, 2015. Construction progressed from East Puce River Road in a westerly direction to Golfview Drive with the following order of operations: topsoil removal, stringing, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins, backfilling, testing, clean-up and post construction tiling.

Union returned to the right-of-way of Phase 2 in spring 2016 to complete the following activities: post construction tiling, repair any subsidence on the right-of-way, ensure there is adequate stability and re-vegetation on all watercourse crossings, perform a general overview of the right-of-way and complete any additional clean-up that may be required.

Phase 3

Construction was initiated for Phase 3 on May 2, 2016 with the pipeline placed into service on November 18, 2016 and cleanup for the year completed on November 30, 2016. Construction progressed from East Puce River Road in a westerly direction to west of West Puce River Road with the following order of operations: topsoil removal, stringing, welding, joint coating, directional drilling, lowering-in, tie-ins, backfilling, testing, clean-up and post construction tiling.

Union will return to the right-of-way in the spring of 2017 to complete the following activities: repair any subsidence on the right-of-way, ensure there is adequate stability and re-vegetation near the watercourse crossing, perform a general overview of the right-of-way 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-2013-0420 except as modified by this Order and these Conditions of Approval.

Except for the changes indicated in Condition 1.4, 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

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.

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.

Changes made during construction include;

- 1) Union proposed to use the existing easement east of West Ruscom River Road to remove the existing NPS 16 pipeline. This resulted in a reduction in the amount of temporary lands required. Union only required three new small blocks of temporary land to complete the removal of the pipe on the west side of the Ruscom River. Between the Ruscom River and East Ruscom Road, Union proposed to abandon this short section of pipeline in place. Disturbance to the site was minimized by abandoning the pipeline in place from east of East Ruscom Road to the west side of the Ruscom River.
- 2) Union's original plan had been to obtain the necessary land rights for the station and Launcher/Receiver site using Union's Board approved Easement Agreement. Union proposed to purchase in fee simple, the station site and an access road to the site. As this site will have permanent above ground facilities which require year round access purchasing the site and the access road was preferred. After detailed planning for the site had been completed, it was also determined that the size of the site should be increased from 30 X 30 metres to 45 X 30 metres.

Union also required additional temporary lands at the Eastern Terminus of the project to facilitate pipeline construction, abandonment and construction of the station.
- 3) Union proposed a change to the construction schedule for the pipeline between West Puce Road and East Puce River Road. Previously Union informed the Board that this portion of

the 2014 Project would be constructed in 2015. This section of pipe was now planned to be constructed in 2016 along with the pipeline identified in Request to Vary EB-2015-0041, Request #2.

- 4) In November 2016, Unions first attempt to cross the Puce River using horizontal directional drill was not successful. During the reaming phase of the directional drill, drill fluids returned into the Puce River. Drilling was immediately stopped and the MOECC and other agencies were notified. Union developed a new plan for the crossing of the Puce River involved damming a short section of the river using aqua dams while directional drilling is taking place. This plan ensured that if there are returns to surface they will not enter the watercourse. In order to implement the plan it was necessary for Union to obtain additional temporary land rights for installation of the temporary dams and access to the construction area.
- 5) Union in its pre-filed evidence stated that it would follow all the requirements of the CSA Z662 code. In relation to pressure testing the code requires that the pipe be tested to a pressure of 1.4 times the maximum operating pressure of the pipeline. Schedule 4 of the pre-filed evidence identifies that the pipeline will be tested to 1.5 times the maximum operating pressure. Union typically tests the pipelines to a target pressure of 1.5 times the maximum operating pressure to allow for site specific variations (such as temperature and elevation changes). For this project the minimum test pressure remained above the code required 1.4 times the maximum operating pressure.

Copies of the letters send to the Ontario Energy Board informing them of the changes can be found in Appendix C.

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 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.

The final monitoring report will address any outstanding issues if they should arise. 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 3.2

The interim monitoring report shall confirm Union Gas'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.

In fulfilment of Condition 3.2, Table 1 summarizes the construction effects and general mitigation measures carried out during construction. All mitigation techniques used throughout construction will also be implemented during cleanup activities as required.

3.2.1 Monitoring Programs

3.2.1.1 Archaeological Assessment

Union retained the services of Stantec to conduct a Stage 1 and Stage 2 archaeological assessment study along the entire pipeline which identified one archaeological site on the east side of West Belle River Road. A Stage 3 and Stage 4 assessment were undertaken on the site with artifacts comprised of late 19 century pieces from a previous homestead of the landowner. The easement was cleared of all artifacts prior to the start of construction.

3.2.1.2 Watercourse Monitoring

It was necessary to cross eleven (11) regulated watercourses as part of the project. Nine (9) crossings were performed using the horizontal directional drill (HDD) method and two (2) using the dam and pump method. All crossings were approved and permitted by the Essex Region Conservation Authority.

Watercourses were protected prior to, during and following construction by installing sediment fencing, straw bales and erosion control matting. Disturbed areas adjacent to the watercourses were seeded immediately following the installation of the pipeline.

Watercourses that were susceptible to erosion were checked after excessive rainfall to verify the effectiveness of the sediment control devices. These watercourses were reviewed for stability and vegetation re-establishment in the spring of 2015 with any necessary mitigation undertaken at that time. The area adjacent to the Puce River will be reviewed in the spring of 2017 for stability and re-vegetation.

3.2.1.3 Tree Removal

Limited single tree removal was undertaken prior to construction. Union has worked with the affected landowners to replace individual trees in spring 2016.

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:

❖ **Essex Region Conservation Authority - Watercourse Crossings**

- For Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Ontario Regulation 148/06.
 - Application for Permit - No. 20/14 - Watercourse Crossings
 - Application for Permit – No. 557-16

❖ **Ministry of Natural Resources – Species at Risk**

- Letter of Advice – AYL-L-005-14

❖ **Ministry of Natural Resources**

- Wildlife Scientific Collectors Authorization - #1083957

❖ **Ministry of the Environment and Climate Change**

- **Permit To Take Water - # 8742-9VVJ62**

❖ **Ministry of Tourism, Culture and Sport**

- **Letter of Compliance - File Number 0000649**

6.0 SUMMARY

This Interim Monitoring Report has been prepared as per conditions in the Board Order EB-2013-0420. 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 will effectively eliminate any long-term impacts to the environment.

A Final Monitoring Report will be prepared to evaluate the success of the measures and if necessary outline areas in need of additional restoration.

“Table 1”

Potential Impacts and Mitigation Measures

TABLE 1: MITIGATION SUMMARY

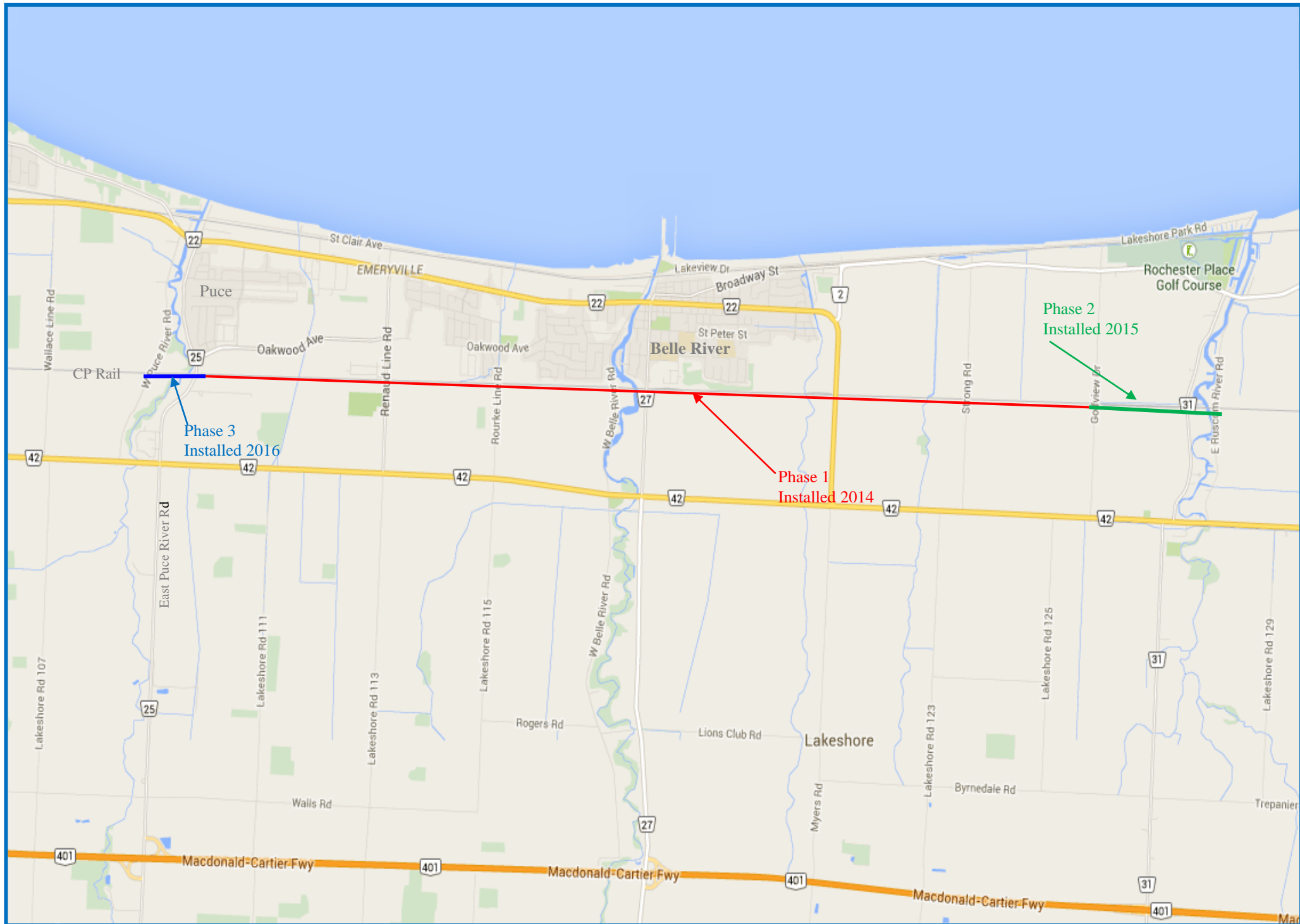
Issue	Potential Impact	Proposed Mitigation
a) Archaeology	Disturbance to cultural heritage resources.	<ul style="list-style-type: none"> • Prior to any activities associated with the project, a Stage 3 and Stage 4 archaeological surveys were completed to ensure the pipeline corridor was free from archaeological concern. No artifacts were found during construction.
b) Species At Risk (SAR)	Encountering SAR	<ul style="list-style-type: none"> • Followed recommendations outlined in Environmental Report and the Ministry of Natural Resources Letter of Advice.
c) Landowner Concerns	Disruption to landowners and tenants	<ul style="list-style-type: none"> • Union provided the landowners/tenants with the telephone numbers of Company personnel. • A Landowner Relations Program was established to track complaints during construction. • To date there have been no complaints entered into the complaint tracking system.
d) Watercourses	Water quality concerns	<ul style="list-style-type: none"> • Union adhered to Company specifications for watercourse crossings. • Union obtained permits from the Essex Region Conservation Authority.
e) Road Side Ditches	Water quality concerns	<ul style="list-style-type: none"> • Ensured ditches were returned to pre-construction condition as quickly as possible.
f) Paved Driveways and Roadways	Disruption to local traffic, landowners and tenants	<ul style="list-style-type: none"> • All paved roadways and driveways were bored if practical. • If it was not possible to bore driveways and roads, steel plates were on site to provide access to landowners and tenants. • Union maintained one lane of traffic open if possible. • Traffic controls were implemented as required. • Driveways were repaired as soon as possible.
g) Public Safety	Public safety concerns	<ul style="list-style-type: none"> • Company inspectors ensured public safety on construction site. • Ensured proper signage and flag persons if required.
h) Construction Equipment	Disruption to landowners and tenants	<ul style="list-style-type: none"> • Equipment was stored well off road shoulders or in a nearby yard when not in use.
i) Construction Noise	Disturbance to landowners and tenants	<ul style="list-style-type: none"> • Construction was carried out during daylight hours whenever possible. • Ensured equipment was properly muffled.

Issue	Potential Impact	Proposed Mitigation
j) Traffic	Disruption to local citizens	<ul style="list-style-type: none"> • At least one lane of traffic was maintained at all times. • Flag persons and warning devices were used to notify traffic of the construction zone in accordance with Ministry of Transportation standards.
k) Fuel Storage and Handling	Improper fuel storage and handling may cause spillage and possible contamination of soil.	<ul style="list-style-type: none"> • Fuel was not stored near watercourses (i.e. Within 100 metres) • Spill clean-up materials were stored on site and available in the event of a spill. Spills or leakage were to be reported to the appropriate authority immediately (Ministry of the Environment Spills Action Centre at 1-800-268-6060) • No reportable spills were recorded during construction.

Appendix A

Location Map

GENERAL LOCATION MAP PANHANDLE REPLACEMENT (LAKESHORE) PROJECT



Appendix B

Conditions of Approval

**Union Gas Limited
Leave to Construct Application**

**Board Staff Proposed
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-2013-0420 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 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 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 Other Approvals and Agreements

- 4.1 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.

Appendix C

Letters to the OEB – Change to Construction

August 21, 2015

Ms. Pascale Duguay
Facilities Applications
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario
M4P 1E4

Dear Ms. Duguay:

**Re: Union Gas Limited ("Union")
Panhandle 2014 Replacement Project
Board File # EB-2013-0420**

Please find attached three Requests to Vary for the above-noted project.

Union believes that these changes are not significant and would appreciate your timely review and approval of these requests, 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,

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

cc: Zora Crnojacki, OEB Project Advisor

REQUEST TO VARY

Project Name: 2014 Panhandle Replacement Project

OEB File Number: EB-2013-0420

Request to Vary: 1

Description and Rationale for Change

There are a number of changes proposed between West Ruscom River Road and East Ruscom River Road.

Union is now proposing to use the existing easement east of West Ruscom River Road to remove the existing NPS 16 pipeline. This has resulted in a reduction in the amount of temporary lands required. Union now only requires three new small blocks of temporary land to complete the removal of the pipe on the west side of the Ruscom River.

Between the Ruscom River and East Ruscom Road, Union is now proposing to abandon this short section of pipeline in place. Disturbance to the site will be minimized if the pipeline is abandoned in place from east of East Ruscom Road to the west side of the Ruscom River.

Construction and Restoration Practices

The abandonment practices are consistent with the TSSA Abandonment Guidelines.

Environmental

No new environmental mitigation measures will be required.

Consultation

Union has met with all of the directly affected landowners and no concerns have been identified.

Lands

Union has the necessary permanent and temporary land rights in place. Where the pipeline is to be abandoned in place Union will retain its existing land rights.

Costs

These changes will not result in any change to the total cost of the project.

Schedule

This change will not result in a change to the in-service date of the project.

Attachments

A map showing the original proposed temporary lands, and the section of pipe that is to be abandoned in place on the east side of the Ruscom River is attached at Schedule 1.

REQUEST TO VARY

Project Name: 2014 Panhandle Replacement Project

OEB File Number: EB-2013-0420

Request to Vary: 2

Description and Rationale for Change

Union is proposing changes to the Eastern Terminus of the project.

Union's original plan had been to obtain the necessary land rights for the station and Launcher/Receiver site using Union's Board approved Easement Agreement. Union is now proposing to purchase in fee simple, the station site and an access road to the site. As this site will have permanent above ground facilities which require year round access purchasing the site and the access road is preferred. After detailed planning for the site had been completed, it was also determined that the size of the site should be increased from 30 X 30 metres to 45 X 30 metres.

Union also requires additional temporary lands at the Eastern Terminus of the project to facilitate pipeline construction, abandonment and construction of the station.

Construction and Restoration Practices

There are no changes proposed for construction of the proposed facilities.

Environmental

No new environmental mitigation measures will be required.

Consultation

Union has met with all of the directly affected landowners and no concerns have been identified.

Lands

Union has the necessary permanent, temporary and fee simple land rights in place.

Costs

These changes will not result in any change to the total cost of the project.

Schedule

This change will not result in a change to the in-service date of the project.

Attachments

A map showing the original and proposed station and launcher/ receiver facilities, temporary land rights and the access road is attached at Schedule 1.

REQUEST TO VARY

Project Name: Panhandle 2014 Replacement Project

OEB File Number: EB-2013-0420

Request to Vary: 3

Description and Rationale for Change

Union is proposing a change to the construction schedule for the pipeline between West Puce Road and East Puce River Road. Previously Union informed the Board that this portion of the 2014 Project would be constructed in 2015. This section of pipe is now planned to be constructed in 2016 along with the pipeline identified in Request to Vary EB-2015-0041, Request #2.

Construction and Restoration Practices

This change will not impact any construction procedures.

Environmental

No new environmental mitigation measures will be required.

Consultation

There are no landowners issues associated with this change.

Lands

No additional land rights are required.

Costs

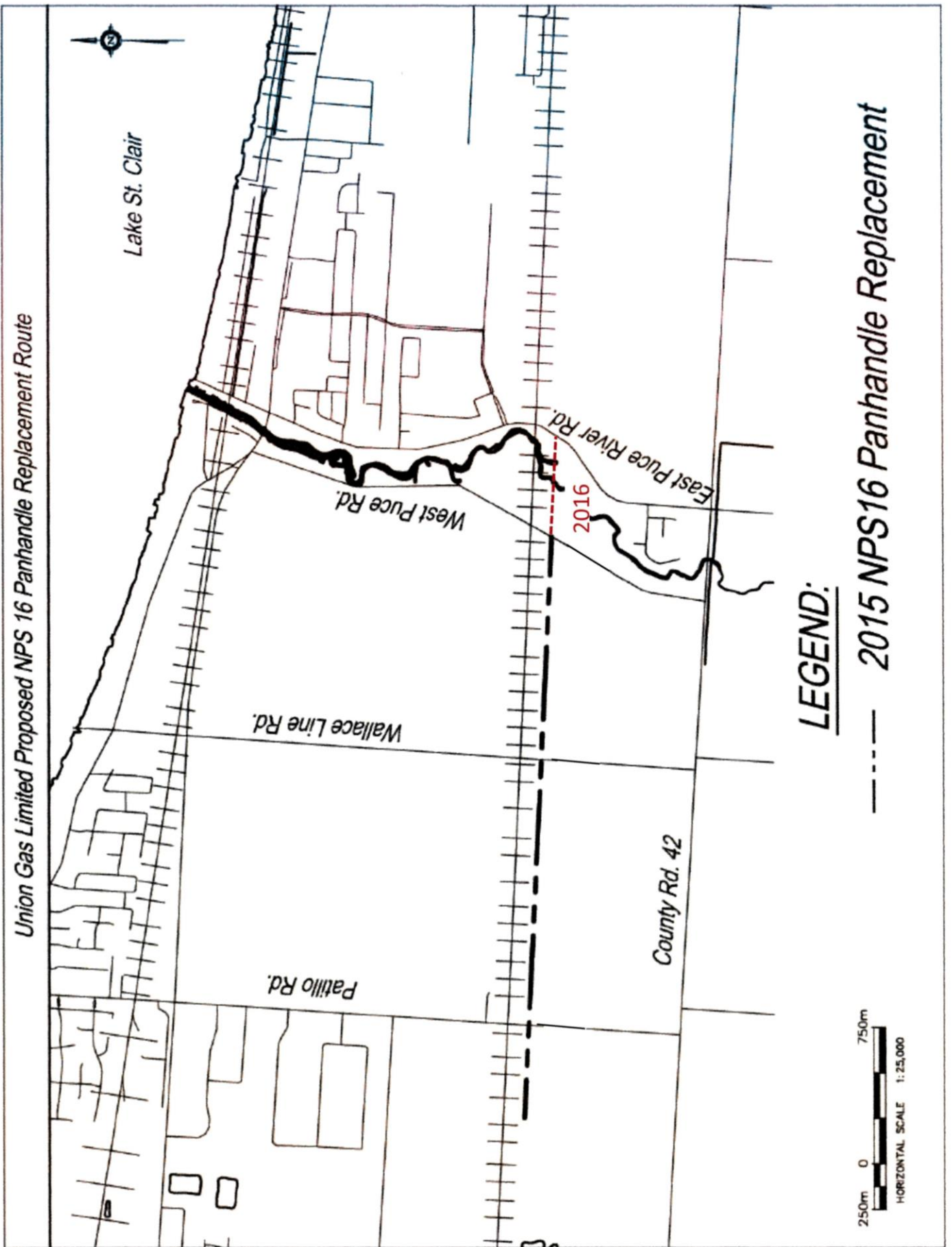
These changes will result in a small increase in costs due to constructing occurring over three years. The final project costs will be reported in the Post Construction Financial Report.

Schedule

This work will be completed in 2016.

Maps

A map showing the location of the 2016 construction is attached at Schedule 1.



**Ontario Energy
Board**

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27th Floor
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**

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Toronto ON M4P 1E4
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Télécopieur: 416-440-7656
Numéro sans frais: 1-888-632-6273



BY E-MAIL

August 28, 2015

W.T. Wachsmuth
Union Gas Limited
Senior Administrator, Regulatory Projects
P.O. Box 2001, 50 Keil Drive North
Chatham, ON N7M 5M1

Dear Mr. Wachsmuth

Re: **Panhandle Replacement 2014 Project – EB-2013-0420**
Request to Vary

The Ontario Energy Board (OEB) is in receipt of your letter dated August 21, 2015 where you informed the OEB of three changes for the Panhandle Replacement 2014 Project.

The first change reduces the number of temporary land rights required east of West Ruscom River Road by using an existing easement. Between Ruscom River and East Ruscom River Road a short section of pipeline would be abandoned in place. The second change involves additional temporary lands at the Eastern Terminus and a purchase of land in fee simple for Launcher/Receiver Site instead of obtaining a permanent easement. The size of the Launcher/Receiver Site has also been increased from 30 x 30 metres to 45 x 30 metres. The third change is to the construction schedule. The section of the pipeline between West Puce Road and East Puce River Road is planned to be constructed in 2016 instead of 2015 to coordinate with construction of the sequential pipeline section of the Panhandle Replacement 2015 Project (EB-2015-0041) along the same route.

As the Vice-President, Applications, I have been delegated the authority of the OEB under Section 6 of the *Ontario Energy Board Act, 1998* to determine whether Union's proposals will result in material changes to the leave to construct granted by the OEB in

the EB-2013-0420 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

You indicated that the first change would not require new land rights or new environmental mitigation measures and would cause no impact on the planned in-service date or project cost. With respect to the first change, Union is expected to conduct and complete the abandonment in accordance with the current requirements of the Technical Standards and Safety Authority. For the second change Union indicated that it has obtained the necessary permanent, temporary and fee simple land rights.

For the third change you anticipate a small cost increase without specifying the estimated amount. The actual project costs and explanation of any variances from estimated costs will be reported in the Post-Construction Financial Report and reviewed as part of Union's next re-basing rate application.

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

Yours truly,

Original Signed By

Lynne Anderson
Vice-President Applications

September 12, 2016

RESS

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

Dear Ms. Walli,

**Re: Union Gas Limited ("Union")
Panhandle 2014 Replacement Project
Board File # EB-2013-0420**

Please find attached a revised Change Request 4, 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,

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

cc: Ceiran Bishop, OEB
Pascale Duguay, OEB
Zora Crnojacki, OEB

REQUEST TO VARY

Project Name: Panhandle 2014 Replacement Project
OEB File Number: EB-2013-0420
Request to Vary: 4

Description and Rationale for Change

Union's first attempt to cross the Puce River using a horizontal directional drill was not successful. During the reaming phase of the directional drill, drilling fluids returned in the Puce River. Drilling was immediately stopped and the MOECC and other agencies were notified. Union has developed a new plan for the crossing of the Puce River. This plan entails damming a short section of the Puce River while directional drilling is taking place. This plan will ensure that if there are returns to surface they will not enter the watercourse. In order to implement this plan it is necessary for Union to obtain additional temporary land rights for installation of the temporary dams and access to the construction area.

Construction and Restoration Practices

Union has modified its construction plan to dry a short section of the Puce River during the directional drilling process.

Environmental

The changes identified above will ensure that drilling returns will not impact the Puce River.

Consultation

Union has discussed the project with the MOECC, Essex Region Conservation Authority who have approved Union's proposal.

Union has also discussed the project with the Landowners adjacent to the crossing and they have not identified any issues with Union's proposal.

Union has also discussed the project with the Canadian Pacific Railway who has not identified any concerns with the proposed project.

Lands

Union has obtained temporary land rights from three private landowners adjacent to the proposed project. Union has discussed and obtained approval from the Municipality of Lakeshore to use municipal lands to complete construction of the crossing.

Costs

These changes will result in an increase in costs due for the project of \$ ____.

Schedule

This work will be completed in September 2016.

Maps

A map showing the location of the Puce River crossing is attached at Schedule 1.

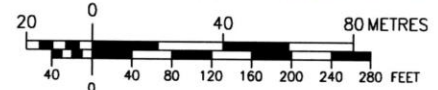
NPS 16 PANHANDLE

EB-2013-0420
Request to Vary 4
Schedule 1

PROPERTY SKETCH SHOWING APPROXIMATE
LOCATION OF PROPOSED TEMPORARY LAND USE RIGHTS
FOR NPS 16 PANHANDLE
PT LT 5 CON EAST OF RIVER PUCE MAIDSTONE; PT 6 12R13891; LAKESHORE



OWNER: THE CORPORATION OF THE TOWN OF LAKESHORE;



PART	APPROX. SIZE (metres)		APPROX. AREA		PART	APPROX. SIZE (metres)		APPROX. AREA	
	(width)	(length)	(hectares)	(acres)		(width)	(length)	(hectares)	(acres)
PART 1 (ACCESS)	3.0	192.8	0.058	0.14					
PIN: 750060089			SCALE: 1:2000			*ALL DISTANCES ARE APPROXIMATE.			DATE: AUG/26/2016
									CAD NUMBER: PL376

January 23, 2017

RESS

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

Dear Ms. Walli,

**Re: Union Gas Limited (“Union”)
Panhandle 2014 Replacement Project
Board File # EB-2013-0420**

This letter is to inform the Board of a change that happened in the field during hydrostatic testing of the pipeline for the above-noted project. Please find attached Change Request 5.

In making the change which is permitted by the CSA code, it is Union’s position that this change is not significant and is allowed for under code. Union 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,

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

cc: Nancy Marconi, OEB
Zora Crnojacki, OEB

REQUEST TO VARY

Project Name: Panhandle 2014 Replacement Project

OEB File Number: EB-2013-0420

Request to Vary: 5

Description and Rationale for Change

Union in its pre-filed evidence stated that it would follow all the requirements of the CSA Z662 code. In relation to pressure testing the code requires that the pipe be tested to a pressure of 1.4 times the maximum operating pressure of the pipeline. Schedule 4 of the pre-filed evidence identifies that the pipeline will be tested to 1.5 times the maximum operating pressure. Union typically tests the pipelines to a target pressure of 1.5 times the maximum operating pressure to allow for site specific variations (such as temperature and elevation changes). For this project the minimum test pressure remained above the code required 1.4 times the maximum operating pressure.

Construction and Restoration Practices

There are no changes proposed for construction of the proposed facilities.

Environmental

No new environmental mitigation measures will be required.

Consultation

No consultation is required for this change.

Lands

No additional lands are required for this change.

Costs

These changes will not result in any change to the total cost of the project.

Schedule

This change will not result in a change to the in-service date of the project.

Attachments

No Attachments.

**Ontario Energy
Board**
P.O. Box 2319
27th. 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**
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Toronto ON M4P 1E4
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Numéro sans frais: 1-888-632-6273



BY E-MAIL

February 1, 2017

Union Gas Limited
W.T. Wachsmuth
Senior Administrator, Regulatory Projects
50 Keil Drive North
P.O. Box 2001
Chatham ON N7M 5M1
bwachsmuth@uniongas.com

Dear Mr. Wachsmuth:

**Re: Panhandle 2014 Replacement Project – EB-2013-0420
Request to Vary
Change Request No. 5**

The Ontario Energy Board (OEB) is in receipt of your letter dated January 23, 2017 where Union Gas limited (Union) advised the OEB of a change to the Panhandle 2014 Replacement Project (Change Request No. 5).

The change relates to Union's hydrostatic testing of the pipeline. Union is required to adhere to all requirements of the CSA Standards Z662 for Oil and Gas Pipelines Systems (CSA Z662). In the pre-filed evidence, Union proposed that the pipeline be tested to a pressure of 1.5 times the maximum operating pressure, which is above the pressure set in the CSA Z662. The CSA Z662 requires that a pipeline in this site specific situation be tested to a pressure of 1.4 times the maximum operating pressure of the pipeline. Union's change request indicates that the hydrostatic testing for this project will be changed to a pressure of 1.4 times the maximum operating pressure of the pipeline as required by the CSA Z662.

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

construct granted by the OEB in the EB-2013-0420 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

Union stated that this change will not modify the construction methods, or environmental mitigation measures and consultation. Union also noted that no additional lands will be needed, and the total cost to the project and the in-service date will remain as planned.

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

Yours truly,

Original Signed By

Pascale Duguay
Manager, Application Policy and Climate Change

Appendix D

Photo Inventory



Although no Species At Risk were detected within the proposed right-of-way during pre-construction surveys, there was still the potential for SAR to be encountered during construction. Therefore reptile barrier fencing was installed at sections in proximity to potential snake and turtle habitat.



Measurements are taken to distinguish between topsoil and subsoil. A dozer is then used to perform the operation of separating the two layers under the supervision of a Union Gas Inspector.



To gain access to the right-of-way it was necessary to install temporary culverts within roadside drains. A culvert is placed within the drain and covered with a geotechnical fabric.



The fabric is then covered with granular material to create a solid driving surface. A permit was obtained from the Essex Region Conservation Authority prior to all culvert installations.



Bridges were used to cross larger watercourses. Cranes lifted the bridges in place onto a base of swamp mats to add stability. Installing bridges in this fashion ensures the least amount of disruption to the bank of the watercourse.



Once the bridge has been removed, there is very little disturbance to the bank.



The majority of the watercourses were crossed using the Horizontal Directional Drill method. This ensured the least amount of disturbance to the watercourses.



During the crossing of the Puce River, aqua dams were used to isolate the section of the river containing the pipeline. Once the water was removed from the area drilling was able to continue.



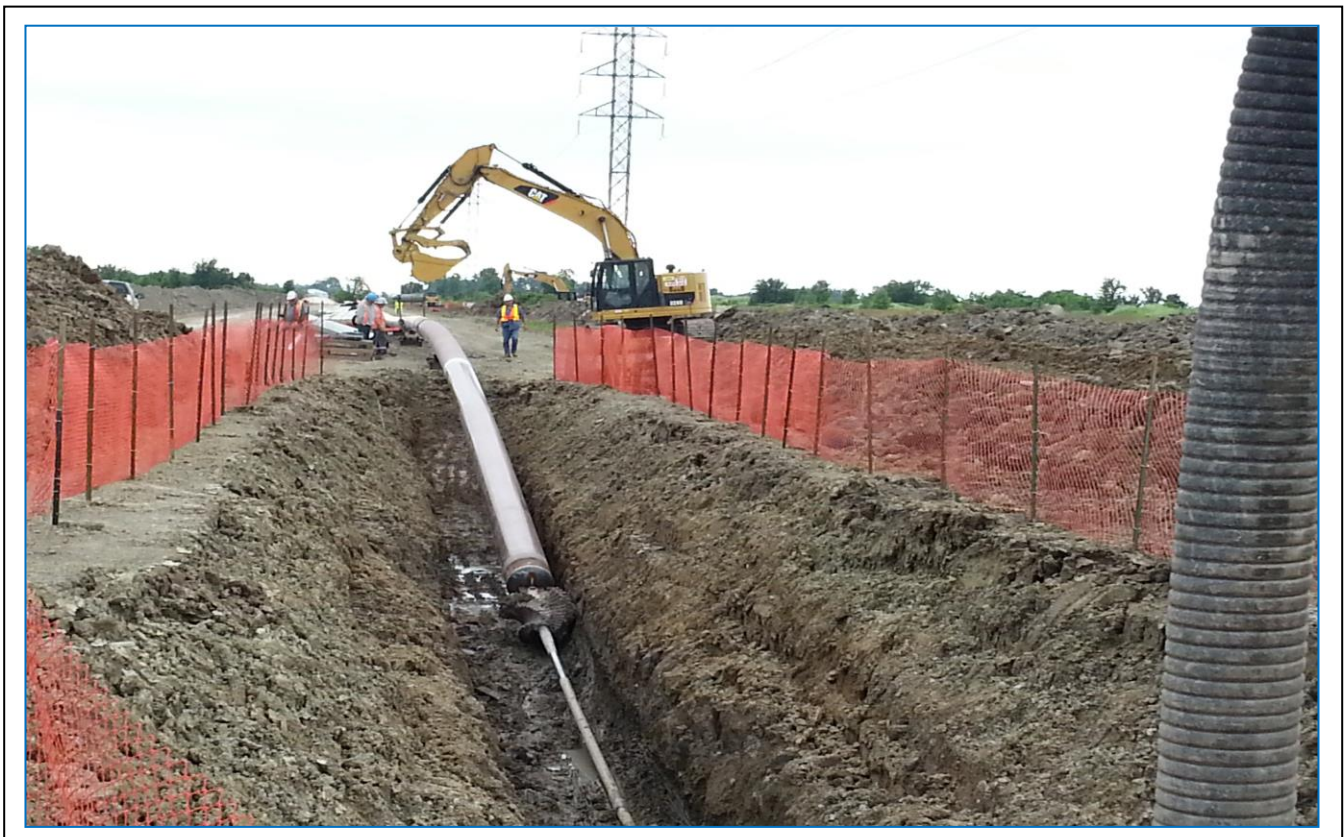
Once the river was dammed and prior to the removal of the water between the dams, the fish were removed and transferred back into the river. Electroshocking equipment in this case a boat, is used to give the fish a mild shock incapacitating them for a few moments so they can be collected.



Following the fish rescue, large pumps and pipes are used to remove the water from between the dams



To ensure the public's safety, fencing was installed across the river above and below the dams. Letters were also sent to each resident upstream of the construction zone along the river to inform them of the instream activities.



Upon completion of the pilot bore, the hole is reamed with increasingly larger drill heads until the desired diameter



Following construction and prior to topsoil replacement the agricultural fields are chisel ploughed to relieve compaction.



Upon completion of the chisel ploughing, the topsoil is replaced disced and returned into production.