

VIA Email, RESS and Courier

Sept. 05, 2019

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

Dear Ms. Walli:

**Re: Enbridge Gas Inc. (Enbridge Gas)
Ontario Energy Board (Board) File No.: EB-2017-0118
Panhandle Replacement Project - Final Monitoring Report**

On June 23, 2017, the Board, in its Decision and Order for the above noted proceeding, granted Union Gas Limited¹ leave to construct 600 meters of 16-inch diameter pipeline in its Panhandle Transmission System in the City of Windsor, County of Essex.

Pursuant to Conditions of Approval 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 Panhandle Replacement Project.

Please contact the undersigned if you have any questions.

Yours truly,

(Original Signed)

Alison Evans
Advisor
Regulatory Applications

cc: Z. Crnojacki
N. Marconi
Regulatory Library

¹ On January 1, 2019 Enbridge Gas Distribution Inc. and Union Gas amalgamated to form Enbridge Gas Inc. ("Enbridge Gas").

2017 PANHANDLE REPLACEMENT PROJECT (JEFFERSON)

FINAL MONITORING REPORT

Prepared By: Enbridge Gas Inc.
Environment
September 2019

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1.0 INTRODUCTION

This Final Monitoring Report is provided pursuant to the Ontario Energy Board (“OEB”) Decision and Order for the EB-2017-0118 proceeding. That Decision and Order granted Union Gas Limited (“Union”) leave to construct 600 metres of 16 inch diameter pipeline in its Panhandle Transmission System in the City of Windsor, County of Essex. Construction involved removing the existing 16 inch diameter pipeline and replacing it with a new 16 inch diameter pipeline to comply with current land use and population density design requirements in accordance with CSA Z662-15 (the “Project”). On January 1, 2019 Enbridge Gas Distribution Inc. and Union amalgamated to form Enbridge Gas Inc. (“Enbridge Gas”).

The Panhandle Transmission System commences at the Ojibway Measurement Station in the City of Windsor and terminates at the Dawn Compressor Station in the Township of Dawn – Euphemia. The section of pipeline that the Project replaced was built in 1951 and is located on Lot 117 and Lot 118, Concession 3, in the City of Windsor. Union acquired new permanent land rights and temporary land use rights for the Project. The two landowners directly affected by the required permanent land rights were The Corporation of the City of Windsor and The Hydro-Electric Power Commission of Ontario. Appendix A of this report sets out a map of the Project Area.

The OEB’s Decision and Order for the Project specified several conditions of approval (“COA”). These COAs can be found in Appendix B of this report. The specific COAs 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-2017-0118 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 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 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, the rationale for taking such actions.

2.0 BACKGROUND

Union was granted leave to construct the Project on June 23, 2017. Construction was initiated on April 9, 2018 and the pipeline was placed into service on June 11, 2018. Cleanup and land restoration were completed concurrently to construction and was completed on June 22, 2018.

The replacement of the 600 m of the existing 16-inch pipeline began at chainage 90 + 836 and continued west to chainage 91 + 496 between the Canadian Pacific Railway and Hydro corridor. The main activities of the Project progressed as follows:

- Isolation, drawdown and blowdown of the section of the 16-inch Panhandle Line
- Excavate and removal of the existing pipeline
- Installation of the new pipeline
- Backfilling, clean up, and site restoration

Union returned to the right-of-way in summer 2019 to perform a general overview to ensure clean-up and restoration measures were successful and all disturbed areas are stable and re-vegetated.

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-2017-0118 and these Conditions of Approval.

Union has constructed the facilities and restored the land in accordance with the OEB's Decision and Order in EB-2017-0118 and this COA.

Union returned to the right-of-way in summer 2019 to monitor the condition of the rehabilitated land. All agricultural land was successfully restored and was undergoing normal agricultural operations. All other land that was disturbed during construction was successfully re-vegetated. Please see Appendix E for pictures of the restored land.

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.

Union has implemented all the recommendations of the Environmental Protection Plan (Environmental Report) filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC") review. Table 1 of this report details Union's adherence to the recommendations and mitigation measures identified in the Environmental Protection Plan.

Union received one comment pursuant to the OPCC review process. This comment was received from the Essex Region Conservation Authority and indicated that:

“Please note that there should be no large stock piling of fill within 50 feet of the top of the bank of the Russette Drain.”

Union confirms that no large stock piling of fill was placed within 50 feet of the top of the bank of the Russette Drain.

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 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. Union advised the OEB of one (1) change to the Board approved construction procedures. This occurred via a change requested filed with the OEB on November 7, 2017. Union received approval for the change request on November 16, 2017. Union’s change request and OEB approval are set out 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. *describe the actions taken or planned to be taken to prevent or mitigate any identified impacts of construction;*
- 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; and*
- vi. *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 September 2018.

- 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 adherence to Condition 3;*

One paper copy and one electronic (searchable PDF) version of this Final Monitoring Report have been filed with the OEB. Union has implemented all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the OPCC review. Executive certification can be found in Appendix D to this report.

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

All disturbed land has been returned to at least pre-construction conditions. All agricultural land was successfully restored and these lands continued normal agricultural operations in 2019. All other 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;*

The mitigation measures taken to address the identified impacts of construction listed in Table 1 of this report were utilized and successful.

In addition to the mitigation measures listed in Table 1, reptile exclusion fencing was installed around two work areas in identified Eastern Foxsnake habitat to prevent potential harm to the species. These two work areas were checked by a qualified Biologist prior to construction. No Eastern Foxsnakes or other Species at Risk were encountered during construction.

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

Prior to construction, the agricultural field was sampled for Soybean Cyst Nematodes (“SCN”) and the results came back positive. All equipment that worked on the agricultural field during construction was cleaned and free of debris prior to leaving the work site to prevent the spread of SCN to non-impacted agricultural fields.

- 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.*

Union’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 raised by a landowner or member of the public that has not been resolved to their satisfaction within three (3) working days. No complaints were received during construction of the Project and therefore a log of complaints was not produced.

During construction, various concerns were raised to Union and the Contractor. These issues were minor in nature and were dealt with by Union and the Contractor in an expeditious manner and did not qualify as formal complaints.

Enbridge Gas Inc. 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 COAs contained in the OEB Decision and Order for the EB-2017-0118 proceeding. The report provides confirmation that Union has implemented all the recommendations of the Environmental Protection Plan filed in the proceeding and all recommendations and directives identified by the Ontario Pipeline Coordinating Committee review. This report also confirms that Union successfully rehabilitated the land disturbed from construction and there are no outstanding concerns. It is anticipated that these mitigation measures and rehabilitation efforts will effectively eliminate any long-term impacts to the environment.

Table 1

Potential Impacts and Mitigation Measures

Table 1: Potential Impacts and Mitigation Measures		
Issue	Potential Impact	Mitigation Measure
Paved/Gravel Driveways and Roadways	Disruption to local traffic, landowners and tenants	<ul style="list-style-type: none"> - One gravel driveway owned by The Hydro-Electric Power Commission of Ontario had to be crossed. - The driveway was crossed via open – cut and restored as per the direction provided by The Hydro-Electric Power Commission of Ontario.
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 construction in accordance with Ministry of Transportation standards.
Public Safety	Public safety concerns	<ul style="list-style-type: none"> - Company inspectors ensured public safety on the construction site. - Proper signage and flag persons were used where required.
Commercial/Retail Businesses and Recreational Areas	Disruption to businesses	<ul style="list-style-type: none"> - No business accesses were disrupted during construction.
Construction Noise	Disturbance to local citizens	<ul style="list-style-type: none"> - Construction was carried out during daylight hours whenever possible. - Equipment was properly muffled.
Nuisance Dust	Disturbance to local citizens	<ul style="list-style-type: none"> - Dust was controlled as required.
Construction Equipment	Disturbance to local citizens	<ul style="list-style-type: none"> - Equipment was stored safely within the project limits when not in use.
Landowner Concerns	Disruption to landowners	<ul style="list-style-type: none"> - The Company provided the landowners and tenants with the telephone numbers of supervisory personnel.

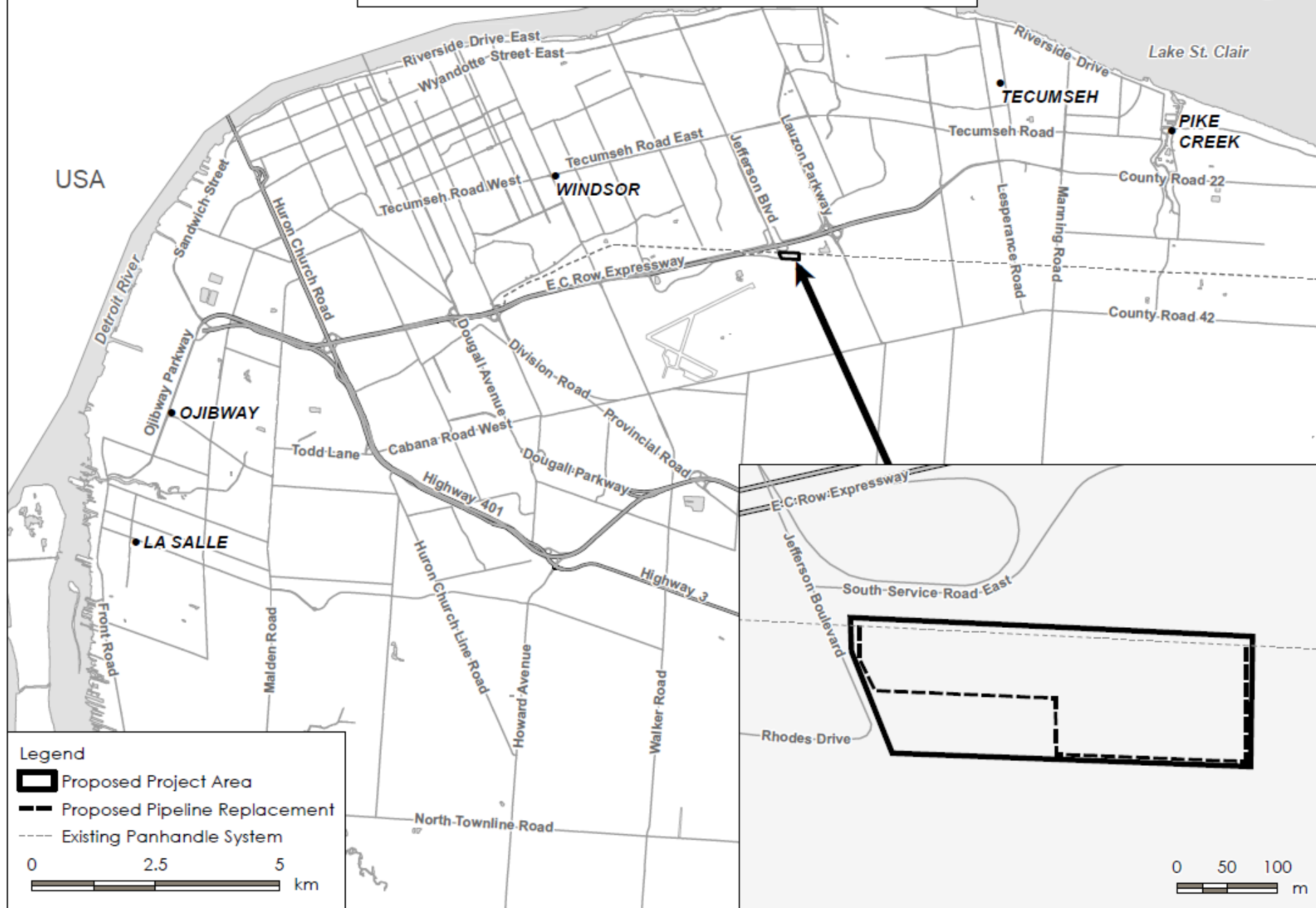
Table 1: Potential Impacts and Mitigation Measures		
Issue	Potential Impact	Mitigation Measure
Fences	Disruption to landowners	<ul style="list-style-type: none"> - Temporary fencing was erected when requested by the landowners. - Permanent fences were replaced as soon as possible to the landowner's satisfaction.
Underground Utilities	Disruption of services	<ul style="list-style-type: none"> - Locates were obtained from all utilities. - Any damages to utilities were repaired as soon as possible.
Archaeology	Disturbance of heritage resources	<ul style="list-style-type: none"> - An Archaeological Assessment was completed prior to construction. - No artifacts were encountered during construction.
Trees	Damage to trees Disturbance to wildlife	<ul style="list-style-type: none"> - Tree removal did not occur as part of construction.
Natural Areas	Sediment run-off	<ul style="list-style-type: none"> - Sediment barriers such as straw bales/sediment fencing were used where there was potential for run-off - No large stock piling of fill within 50 feet of the top of bank of the Russette Drain was permitted.
Watercourse Crossings	Water quality concerns	<ul style="list-style-type: none"> - Union received a clearance from the Essex Region Conservation Authority to work in the vicinity of the Russette Drain.
Vegetative Cover	Loss of vegetative cover leading to soil erosion	<ul style="list-style-type: none"> - Cover was restored by seeding as soon as possible where required.
Soils: Erosion	Introduction of sediment/silt to adjacent lands	<ul style="list-style-type: none"> - Disturbed soils were restored as soon as possible after construction.
Spills	Public safety issue	<ul style="list-style-type: none"> - No spills were identified during construction.

Table 1: Potential Impacts and Mitigation Measures		
Issue	Potential Impact	Mitigation Measure
Contaminated Soils	Dealing with contaminated materials Public safety issue	- No contaminated soils were identified during construction.
Site Restoration	Disturbance to public and private properties	- The construction area was restored as soon as possible upon completion of pipe installation.

Appendix A

General Location Map

Union Gas Limited – 2017 Panhandle Replacement Pipeline Project



Appendix B

Conditions of Approval

Leave to Construct Conditions of Approval

Application under Section 90 of the OEB Act

Union Gas Limited

EB-2017-0118

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-2017-0118 and these Conditions of Approval.
2. (a) Authorization for leave to construct shall terminate 12 months after this Decision and Order 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 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, licences, 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, the rationale for taking such actions.

Appendix C

Change Requests and Approvals



November 7, 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 Jefferson Replacement Project
Board File # EB-2017-0118**

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,

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

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

REQUEST TO VARY

Project Name: Panhandle Jefferson Replacement Project

OEB file Number: EB-2017-0118

Request to Vary: 1

Description and Rationale for Change

Union is now proposing to construct this project in 2018. It has been necessary to move this project to 2018 for the following reasons:

- Union could not construct the project until it had all of the land rights in place. Obtaining the necessary land rights from the city of Windsor took longer than anticipated and the final documents were not signed until October 17, 2017
- As stated on page 10 of the environmental protection plan union was required to complete species at risk assessments along the route of the proposed pipeline. Union was required to complete a fall survey for Willow Leaf Aster. This survey could not be completed until late September. The results of the survey were negative and no Willow Leaf Aster was found along the route of the proposed pipeline.
- Pipeline construction is proposed to take 8-10 weeks. Starting construction in late October would mean that construction would not be completed until late December or early January. Depending on weather and operating conditions on the Panhandle System it may not be possible to shut down the existing NPS 16 pipeline to tie the proposed facilities into the existing system.
- Construction in November and December is possible but it's expected to be wet conditions and snow, it is preferred to construct the pipeline in April and May of 2018.

Construction and Restoration Practices

There are no changes to the Construction and Restorations practices identified in Union's pre-filed evidence.

Environmental

No new environmental mitigation measures will be required.

Consultation

Union will discuss the change with the directly affected landowners.

Lands

No additional lands are required.

Costs

Deferring the Project to 2018 will increase the project costs by \$15,000. These additional costs can be covered by the contingencies identified in Union's pre-filed evidence.

Schedule

The in-service date of the project is proposed to be July 30, 2018.

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
C.P. 2319
27^e 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

November 16, 2017

Union Gas Limited
Bill 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 Jefferson Replacement Project, EB-2017-0118
Request to Vary
Change Request No. 1**

The Ontario Energy Board (OEB) is in receipt of your letter dated November 7, 2017 in which Union Gas Limited (Union) proposed a change to the Panhandle Jefferson Replacement Project (Project) (Change Request No. 1).

Union proposes to defer the commencement of construction from the originally proposed Q4 2017 to Q2 2018. Union submits that the delay is necessary because:

- Securing the necessary land rights took longer than anticipated
- Species at risk assessments could not be completed until late September
- Construction in November and December is not preferred
- It may not be possible to shut down the existing NPS 16 pipeline on the Panhandle System to tie-in the proposed facilities

Union submits that this change will not modify the project's construction or restoration methods, environmental mitigation measures, consultation, or land requirements. The change will increase the project costs by approximately \$15,000, but this can be accommodated within the Project's budgeted contingency.

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-

- 2 -

2017-1118 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 will approve the requested change in project schedule. With respect to the increased costs of the pipeline, I note that the incremental amount can be covered under the budgeted Project contingencies.

Yours truly,

Original Signed by

Nancy Marconi
Manager, Applications Supply and Infrastructure

Appendix D

Executive Certification



2017 Panhandle Replacement Project (Jefferson)

EB-2017-0118

Decision and Order

June 23, 2017

I hereby certify Union Gas Limited has complied with the Decision and Order, Schedule B, EB-2017-0118, Conditions 3.0 and 6. b) i.

Sept. 4, 2019

Date

Michelle George

Michelle George

Vice President, Engineering

Enbridge Gas Inc. – Operating as Union Gas

Condition 3.0

Union 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 6.0

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;

C of A Senior Executive Certification – Condition 3

Appendix E

Photograph Inventory



1. All disturbed areas from construction were fully re-vegetated in 2019.



2. The driveway that was open cut was fully restored to pre-construction conditions or better.



3. The new pipeline section route was fully re-vegetated in 2019 (looking along where the trench was dug and pipeline installed).



- 1.
4. All fences removed during construction were repaired. The agricultural field (background) was undergoing typical operations in 2019 (planted with soybeans).