

December 14, 2018

BY RESS & Courier

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

Dear Ms. Walli:

Re: Union Gas Limited ("Union") Panhandle Reinforcement Project Board File EB-2016-0186

Pursuant to Condition 6 (b) i. -v. of the Board's Conditions of Approval for the abovenoted project, enclosed please find the Final Monitoring Report.

Sincerely,

[original signed by]

Shelley Bechard Administrative Analyst, Regulatory Projects :sb Encl.

cc: Zora Crnojacki Nancy Marconi Regulatory Library

PANHANDLE REINFORCEMENT PROJECT

FINAL MONITORING REPORT

Prepared by: Union Gas Limited Environmental Planning

December 2018

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1.0 INTRODUCTION

This Final Monitoring Report is provided in compliance with the Ontario Energy Board ("OEB") Order EB-2016-0186 granting Union Gas Limited ("Union") "Leave to Construct" approximately 40 kilometres of Nominal Pipe Size (NPS) 36 inch diameter steel natural gas pipeline and ancillary facilities in the Township of Dawn-Euphemia, Township of St. Clair and the Municipality of Chatham-Kent.

The pipeline was constructed as a "lift and lay" which involved the removal of an existing NPS 16 pipeline and the installation of a new NPS 36 pipeline generally within the same easement. Construction commenced at Union's Dawn Compressor Station in the township Dawn-Euphemia and proceeded southwest within the existing cross country easement approximately 40km to Union's Dover Transmission Station in the Municipality of Chatham-Kent. Significant features crossed by the pipeline include, the Sydenham River, Hwy 40, Little Bear Creek and the village of Grande Pointe. 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 OEB in its Order dated February 23, 2017 and as listed below. The complete Conditions of Approval can be found in Appendix B1. The Conditions of Approval addressed in this report are as follows:

Condition 1

Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2016-0186 and these Conditions of Approval.

Condition 3

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 4

Union 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 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's 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, 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's 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, 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 approval to construct the Panhandle Reinforcement Project on February 23, 2017. Construction was initiated on May 25, 2017 with the pipeline placed into service on November 11, 2017. Clean-up and land restoration along the pipeline corridor was halted for the year on December 8, 2017. Clean-up and land restoration continued in 2018 commencing June 4, 2018 and was halted October 31, 2018 with any outstanding clean-up items to be completed in 2019.

Construction was completed in 2017 and progressed from Union's Dawn Compressor Station to Union's Dover Transmission Station in a southwesterly direction with the following order of operations: staking, clearing, topsoil stripping, grading, trenching, removal of the NPS 16 pipeline, backfilling, stringing, welding, joint coating, directional drilling, trenching, lowering-in, tie-ins, back filling, testing and initiation of clean-up.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 <u>Condition 1</u>

Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the Board's Decision and Order in EB-2016-0186 and these Conditions of Approval.

Union has complied with all conditions imposed by the Board, including those from the change request approvals (Condition 4), during construction of the pipeline and has/will restore the land according to the evidence in support of its application.

3.2 <u>Condition 3</u>

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.

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

3.3 <u>Condition 4</u>

Union 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.

In addition to the two (2) changes to the OEB-approved construction or restoration procedures presented in the 2018 Post Construction Report, Union advised the Board of two (2) additional changes to the Board-approved construction or restoration procedures on December 18, 2017. Union received Board approval for the two (2) changes on January 15, 2018. The Union change requests and Board approval are presented in Appendix B2

3.4 <u>Condition 6</u>

Both during and after construction, Union 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's 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, 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.

A Post Construction Report was filed with the Board within three months of the November 11, 2017 in-service date. The Post Construction Report addressed conditions (i) through (v).

- 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's adherence to Condition 3;

One paper copy and one electronic (searchable PDF) version of this Final Monitoring Report are provided to the Board. This report is certified by Mike Shannon, Vice President Storage Transmission & IMO, that Union has implemented all the recommendations of the Environmental Report filed in the proceeding, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee review (Appendix B3).

ii. describe the condition of any rehabilitated land;

In 2018 Union continued and completed the rehabilitation of agricultural lands impacted by the project. Soil grade and top soil restorations were completed for all agricultural lands. Post construction tiling was completed for the majority of the agricultural lands; any outstanding post construction tiling will be completed winter/spring 2019.

Stream/drain and road crossings were completed by fall 2017. Inspections of the stream/drain and road crossings were completed spring 2018, with the exception of one minor repair to a small municipal drain (SC-12), all were found in good condition with little to no erosion, subsidence and established vegetation growth. The municipalities have reviewed and approved the road and drain crossings as completed and in an acceptable condition.

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

The entire right of way and in particular areas in close proximity to watercourses and wetlands were checked for stability, vegetation re-establishment and subsidence during the spring of 2018. The watercourses avoided by HDD crossings (Sydenham River and Little Bear Creek) remain in their original state undisturbed by construction. All other watercourse crossings were inspected and identified to be stable and in good condition, the erosion matting, and seeding has performed well at all locations.

For the approximate 10km of agricultural land that was restored in 2017 a walking survey was completed to identify locations where additional restoration measures were required. The results of this survey identified several locations where additional topsoil would be required due to subsidence along the former trench-line over the winter. Additional top soil and grading at all of these locations were complete in 2018 to the satisfaction of impacted landowners. The remainder of the agricultural lands were restored in 2018 and included the restoration of topsoil, de-

compaction and grading. The majority of post construction tiling has been completed with the remaining few properties to be completed winter/spring 2019.

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

The results of analyses and monitoring programs and any recommendations therefrom are presented in Section 3.4.1

v. include a log of all complaints received by Union, 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 (Table 1), which identifies the current status of landowner complaints received as a result of pipeline construction, was in effect. A complaint is identified as a concern raised by a landowner that has not been resolved to the landowner's satisfaction within three (3) working days. Complaints that remain open will continue to be addressed by Union and a status update will be provided in the Final Monitoring Report.

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

Union will continue to monitor the state of the land and environment and will address any additional landowner concerns if they should arise.

3.4.1 Monitoring Programs

3.4.1.1 Archaeological Assessment

Union Gas Limited retained the services of Stantec Consulting Limited to complete Archaeological Assessments for the project area. Clearance letters were received from the Ministry of Tourism, Culture and Sport for the Stage 1, Stage 2, Stage 3 and Stage 4 sites identified within the project area.

At three (3) locations along the project the identified archaeological sites extended beyond the project area and were not fully cleared of cultural resources beyond the project area. At these locations protective fence was installed along the project area, which was monitored by a registered professional archaeologist to ensure there was no encroachment or potential damage to the adjacent un-cleared area. A post construction assessment by a registered professional archaeologist was completed for these areas and confirmed no impact or additional action items required in relation to these adjacent archaeological resources.

3.4.1.1 Watercourse Monitoring

It was necessary to cross forty-five (45) watercourses as part of the Project. Eight (8) of the watercourses were identified as closed tile drains that did not require permitting, the remaining thirty-seven (37) were reviewed and permitted by St. Clair Conservation Authority or Lower Thames Valley Conservation Authority.

Two (2) watercourses were crossed using the horizontal directional drill (HDD) technique and the remaining forty-three (43) watercourses were crossed using an isolated dry crossing technique (dam & pump) approved by Fisheries and Oceans Canada. All watercourse crossings were performed in accordance to permits and approvals.

Watercourses were protected prior to, during and following construction with sediment fencing. Immediately following pipeline crossings and immediately following temporary access removals, disturbed areas adjacent to the watercourses were seeded and protected with erosion control blanket or stabilized with geo-tech fabric and rip-rap (as per the requirements of the Municipality of Chatham-Kent) sediment fencing was also installed until the adjacent land was restored to pre-existing conditions.

All watercourse crossings were monitored during construction by an Environmental Inspector and all watercourses were inspected in the spring of 2018 and identified to be stable and revegetating well.

3.4.1.3 Soil Testing

Prior to construction, Union conducted soil sampling on agricultural lands along the pipeline route. Soil samples were taken and analyzed for Soybean Cyst Nematode (SCN). SCN is a microscopic worm-like organism found in soils and obtain their nutrients by feeding on the root systems of soybeans. Results indicated that SCN was present throughout the project areas with the exception of a few properties.

A construction protocol to deal with potential SCN impacted fields was developed and implemented with input from professional soil scientists, the Ontario Ministry of Agriculture, Food and Rural Affairs and landowners reduce the risk of transferring SCN. The protocol included the installation of equipment wash stations and thoroughly washing machinery and equipment moving from a positive SCN location to a Negative SCN.

3.4.1.4 Water Well Monitoring

Prior to construction, Union retained the services of Stantec Consulting Limited (Stantec) to undertake a water well monitoring program along the entire pipeline route as recommended in the ER and required under the PTTW. The purpose of the program was to establish baseline groundwater conditions for comparative purposes should groundwater interference complaints arise as a result of the construction or operation of the pipeline.

The baseline monitoring program included a door-to-door survey to identify groundwater users within 100 m of general construction activity for the proposed pipeline installation and 500 m of the HDD locations. Well owners were provided a letter detailing the proposed pipeline construction and the proposed monitoring program and had the option of participating in the program. The notification letter included the telephone number of Union's Lands Relations Agent.

Pre-construction water quality samples were collected by Stantec. In total, fifteen (15) water quality samples were collected from fifteen (15) supply wells.

Water samples were analyzed for general inorganic and bacteriological water quality parameters and the results were compared to the Ontario Drinking Water Quality Standards (ODWS) established by the Ontario Ministry of the Environment and Climate Change (MOECC) per Ontario Regulation 169/03.

Upon receiving the results, Stantec immediately notified any residents whose water exceeded the MOECC ODWS Maximum Acceptable Concentration (MAC) for any tested parameter. Stantec provided the residents with a summary letter of the results and with the contact information for the public health unit for those wells that water quality results indicated ODWS MAC exceedances.

During and post construction additional water well sampling was completed at the request of the well owner or in the event of a complaint. A total of seven (7) wells were sampled through this process, two (2) were sampled in association with complaints and five (5) were sampling requests. The five wells sampled at the request of the well owners were sampled on two occasions, during and after the HDD installation at Little Bear Creek. Of the two well samplings for complaints, one complaint was resolved and one remains open. An additional localized water well monitoring program was completed in the summer of 2018, in the vicinity of Little Bear Creek, to monitor potential impacts to wells from the installation of cathodic protection anode beds. The monitoring program include the collection of pre and post sampling and testing of four (4) private wells in the vicinity anode bed installations. The results of the additional well monitoring program did not identify impacts to private wells from activities associated with pipeline construction.

3.4.1.5 Species at Risk (SAR)

Prior to construction, Stantec completed detailed habitat assessments and field surveys to confirm habitat and species occurrences in the Project Area. Six (6) SAR or their habitats were identified within the project area, not including those in Little Bear Creek and the Sydenham River as they were avoided by installing the pipe via HDD. The six SAR included: Bobolink, Eastern Meadow Lark, Dense Blazing Star, Eastern Foxsnake, Pugnose Minnow and Pugnose Shiner.

All required SAR permits and approvals were obtained and all avoidance/mitigation measures were completed. During the construction of the project three (3) new SAR records were identified within the project area, these records included two (2) species, Lake Chubsucker and Mapleleaf Mussel. Notifications of the new records were made to both DFO and MNRF.

3.4.1.6 Tree Removal

Tree removal was initiated on February 13th, 2017 and was completed on March 31st, 2017 thus avoiding avian nesting concerns.

3.4.1.7 Tree Replacement Program

This program is designed as a reforestation initiative to replant twice the area of trees cleared from the woodlots prior to construction. Landowners who have had trees cleared from their property are given the option to have native tree species planted on their property in the spring of 2019 any trees not accepted by affected landowners will be donated to the St. Clair Region Conservation Authority for their use to ensure Union achieves the goals of the tree replacement program.

4.0 <u>SUMMARY</u>

This Final Monitoring Report has been prepared as per conditions in the Board Order EB-2016-0186. 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.

Clean-up and land restoration of the pipeline route has been largely completed in 2018 with any outstanding items to be addressed winter/spring 2019.

Table 1

Summary of Landowner Complaints Panhandle Reinforcement Pipeline Project

SUMMARY OF LANDOWNER COMPLAINTS Panhandle Reinforcement NPS 36

Date	Property Identification Number	Complaint	Resolution	Status
April 7 th , 2017	NA	Non-impacted Landowner (LO) reported unauthorized truck turning and parking in private parking lot. Offered use of areas with agreement. If no agreement, please address/mitigate issue.	Apr 11/17 Contractor made signs ("Banister No Entry") and posted them on barrels in church parking lot. Sept 15/17 LO reports dump trucks parking/waiting in private parking lot and in front of house. LRA followed up with Contractor who contacted lead of dump truck hauling with instructions not to use said parking areas at all.	Resolved September 15 th , 2017
July 15 th , 2017	P124	Landowner complained re: construction proceeding in wet conditions. Reported mats floating, rutting off mats.	UG Superintendent addressed issues with Contractor and UG Inspection and instructed Contractor to not work in wet conditions. Remediation plan in place and follow up discussions took place. Meeting held with LO, LRA on July 29/17. LO satisfied with all.	Resolved July 29 th , 2017
August 4 th , 2017	P95 P96	LRA received text message from landowner complaining about the noise and vibration from the HDD boring activities running 24/7 on the southside of Sydenham River (HDD site approx. 235 metres away from the house).	LRA received call from CAEPLA Representative stating they received a call from landowner complaining about the compensation for the noise and vibration. LRA advised CAEPLA representative they spoke with landowner stating that they were paid disturbance in Temporary Land Use Agreement which covers any inconvenience for disruption caused by the Panhandle Pipeline Construction; advised CAEPLA rep.	Resolved August 12 th , 2017

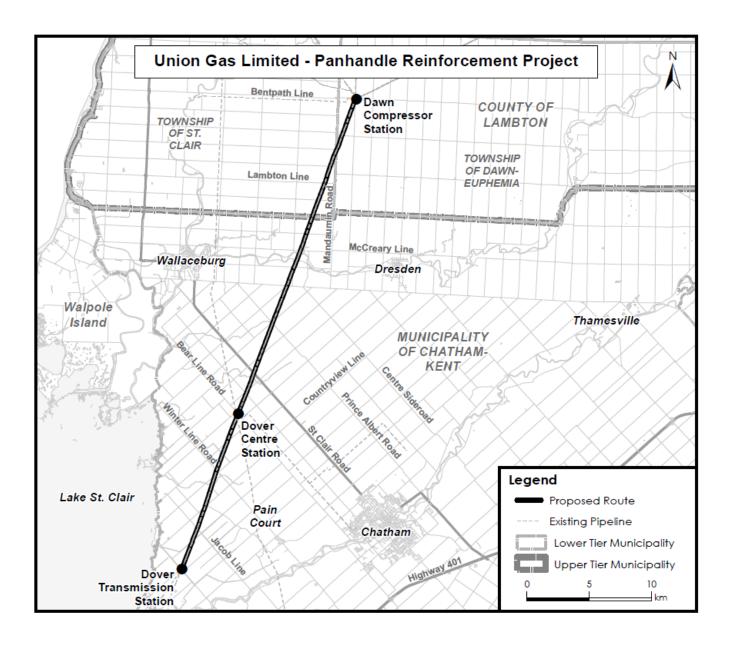
Date	Property Identification	Complaint	Resolution	Status
	Number			
September 5 th , 2017	P89	LRA received phone call from P89 landowner claiming neighbour's water well has gone dry. LRA spoke with neighbouring landowner. Claiming water well levels have been decreasing over the past couple of weeks; not sure why but thinks partly due to the Panhandle pipeline construction activities.	Stantec Hydrogeologist completed an assessment of the water well and determined well issue not related to current Panhandle Construction. LRA advised landowner that UG will pay for potable water as required and a new pump to replace burnt-out pump, replacement pump solved the issue. Invoice from landowner for new pump and technicians time received and paid for.	Resolved September 27th, 2017
September 23 rd , 2017	P102	Landowner complained about water quality and black sediment present over the last few weeks. Said they have had same experience years ago but again only recently and they assumed it was from the recent 2017 Panhandle Pipeline construction activity. Landowner also complained of damage to brick work at one location on the house.	Sept 29/17 Stantec determines water quality issues not related to Union Gas construction (per Report dated Oct 11/17). Nov 24/17 Wood/AMEC provides property condition survey report with the opinion that pipeline construction was unlikely to have impacted house but instead issues were potentially a result of corrosion of metallic ties or insufficient ties from the construction of the house, or a combination of both. Dec 5/17 Met with LO's to review water well concerns and brick wall concerns. Well water concerns, Union agreed to work with LO and LO's well specialist to mitigate water quality concerns and to continue to supply potable water. LRA delivered 15 cases of bottled water to date. LO reports having 3-4 cases remaining. Union Gas continues to communicate with the landowner and remains committed to achieving a resolution.	Currently Un-resolved

Date	Property Identification Number	Complaint	Resolution	Status
October 30 th , 2017	P112, P113	New Landowner of the property - wanted Union Gas to pay for graveling of farm access and laneway too their driveshed - has new farm equipment arriving needs it "beefed up".	 Oct. 30/17: Further to phone call received from Landowner; LRA offered to pay for one tri-axle load of gravel to widen and "beef-up" access to farm laneway, where NPS36 pipeline located. Landowner not willing to accept offer - Landowner stated will order the gravel he requires to build access and laneway; and fight Union Gas for reimbursement. July 24/18: LRA reviewed Landowner proposal of settlement with Union Gas Management Team and Legal Counsel. Further to consultation with LRA, Union Gas Legal Counsel presented counter offer to Landowner's Attorney, to settle out-of- pocket expense claim incurred by Landowner for the rental of pumps and labour cost incurred to operate pumps, due to earlier Panhandle Construction activities. Aug. /18: Follow-up; LRA spoke with Landowner who stated that he was willing to accept Union Gas' offer. Oct. / 18: LRA has met with Landowner several times since and is satisfied with how lands have been restored and stated that they have no outstanding issues or concerns. 	Resolved 2018/08/01

Appendix A

General Location Map

GENERAL LOCATION MAP PANHANDLE REINFORCEMENT PROJECT



Appendix B1

Conditions of Approval

Leave to Construct Conditions of Approval Application under Sections 90 of the OEB Act Union Gas Limited EB-2016-0186

- 1. Union Gas Limited (Union) shall construct the facilities and restore the land in accordance with the OEB's Decision and Order in EB-2016-0186 and these Conditions of Approval.
- 2. (a) Authorization for leave to construct shall terminate 12 months after the decision is issued, unless construction has commenced prior to that date.
 - (b) Union 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 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 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 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 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's 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, 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's 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, 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 B2

Change Requests and Approvals



December 18, 2017

RESS & COURIER

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 Reinforcement Project Board File # EB-2016-0186

Please find attached Change Requests 3 and 4, for the above-noted project. A confidential copy of Schedule 1 for Change Request 3 will be sent to the Board separately by courier.

Union believes that this change is not significant and would appreciate your timely review and approval of this request.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-4601.

Sincerely,

Mark A. Murray J.D. Manager, Regulatory Projects & Land Acquisition

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

REQUEST TO VARY

Project Name: Panhandle Reinforcement Project

3

OEB File Number: EB-2016-0186

Change Request:

Description and Rationale for Change

Union is requesting additional permanent and temporary land use areas ("Land Rights"), from individual landowners.

Construction and Restoration Practices

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

Environmental

No new environmental mitigation measures will be required.

Consultation

Union has met with the directly affected landowners and no issues have been identified.

Lands

Union has acquired the necessary permanent and temporary land rights, from the landowners. Additional permanent easements were required in small sections of the NPS 16 pipeline that had to be abandoned in place due to proximately to existing utilities and depth of the pipeline. The new permanent rights are identified on Pages 3 and 4 of Schedule 1 as the green hatched areas. Additional temporary land use areas were required for the construction and clean-up activities and are identified on Pages 1, 2 and 5 of Schedule 1 as the solid green areas.

Attached as Schedule 2 is a chart identifying the Land Rights in red.

Costs

These changes will not result in any additional costs to the project.

Schedule

The Project is in-service.

Maps

A map setting out the additional Land Rights is identified in green at Schedule 1.

REQUEST TO VARY

Project Name: Panhandle Reinforcement Project

OEB File Number: EB-2016-0186

Change Request: 4

Description and Rationale for Change

In addition to the construction of the pipeline, modifications were required to be made to the Dawn Compressor Station and the Mersea Station for the interconnection with the pipeline. Union, in its pre-filed evidence at Exhibit A, Tab 9, Schedule 1, provided for construction to commence in May 2017 and complete in October 2017.

To accommodate the new pipeline, it was identified that the Dawn Compressor Station would require modification. This work was scheduled to be completed in summer 2017. A new isolation value is required as part of this modification. As a result of extended delivery times for the value at the Dawn Compressor Station, construction for this project will not be completed until the summer of 2018.

Union in its pre-filed evidence on Exhibit A Tab 9 Page, Line 12 identified that the existing NPS 6 station inlet piping was to be replaced with a NPS 8 piping. During detailed design it was discovered that in order to meet the finalized design criteria and maintain proper pipeline pressures and velocities that the piping should be NPS 10 not NPS 8. As a result NPS 10 inlet station piping was installed.

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

The total cost for the new valves and the construction costs is approximately \$2.4 M, this will not result in an increase to the costs to the Project budget.

Schedule

This work did not affect the operation of the pipeline nor the in-service date of the Project.

Maps

No attachments are required for this change request.

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

January 15, 2018

Union Gas Limited Mark A. Murray J.D. Manager, Regulatory Projects and Land Acquisitions 50 Keil Drive North P.O. Box 2001 Chatham ON N7M 5M1 mmurray@uniongas.com

Dear Mr. Murray:

Re: Panhandle Reinforcement Project – EB-2016-0186 Request to Vary Change Requests No. 3 and 4

The Ontario Energy Board (OEB) is in receipt of your letter dated December 18, 2017 in which Union Gas Limited (Union Gas) requests two variances to the OEB approved Panhandle Reinforcement Project (Project) - Change Requests No. 3 and 4.

Change Request No. 3 pertains to pipeline construction and the need for an additional two permanent and three temporary land use agreements. Union Gas submits that this change will not modify the Project's originally proposed construction and restoration methods, environmental mitigation measures, or schedule. Union Gas has consulted with the affected landowners and has obtained the necessary land rights. Union Gas submits that the additional land use requirements will not result in an increase to the Project budget.

Change Request No. 4 pertains to changes at the Dawn Compressor Station. The first change is a project delay because of extended delivery times associated with a new isolation valve. The second change is related to the station inlet valve, which has been changed from NPS 8 to NPS 10 in order to better accommodate pipeline pressures and flows. Union Gas submits that these changes will not modify the Project's originally proposed construction and restoration methods, environmental mitigation measures, consultation activities, or land use requirements. Union Gas indicated that the isolation valve component of the Project is now estimated to be complete in the summer of 2018 rather than the originally proposed summer 2017, but that the extended delivery of the isolation valve did not affect the operation of the pipeline or the in-service date of the overall Project. Union Gas submitted that there will not be an increase in Project costs associated with these changes.

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-2016-0186 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

As described above, Union Gas has informed the OEB that the requirement for additional land use agreements will not result in a cost increase or modification of the Project's originally proposed construction and restoration methods, environmental mitigation measures, or schedule. In addition, Union has already acquired the necessary land rights. With respect to changes at the Dawn Compressor Station, Union Gas has informed the OEB that there will not be modifications to the Project's originally proposed construction and restoration methods, environmental mitigation measures, consultation activities, budget or land use requirements, and that the operation of the pipeline and in-service date of the Project have not been impacted.

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

Yours truly,

Original Signed by

Nancy Marconi Manager, Applications Supply and Infrastructure

Appendix B3

Executive Certification



Panhandle Reinforcement Project EB-2016-0186 Decision and Order February 23, 2017

I hereby certify Union Gas Limited has complied with the Decision and Order, Appendix B, EB-2016-0186, Section 6 (b) (i).

2018 DEC13

Date

MICHAEL P. SHANAON

Senior Executive

Condition 6 b) i.

- a) 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's adherence to Condition 3;

Condition 3

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.

Appendix C

Photograph Inventory



Pull top soil to restore agricultural lands.



Topsoil leveling.



Restored agricultural land of a formally wooded area.



Restored agricultural land following cover crop seeding (2017).



Restored agricultural land following cover crop seeding (2018).



Cover crop mowing to prevent Bobolink nesting (2018).



Restoration of topsoil and topsoil grading (2018).



Removal of archaeological protection fencing following completion of adjacent agricultural lands soil restoration (2018).



Restored watercourse crossing one year after construction (2018).



Restored watercourse crossing one year after construction (2018).