

**By RESS & Courier**

May 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  
Dawn Parkway 2016 Expansion Project  
Board File # EB-2014-0261**

Pursuant to Condition 3.1 of the Board's Conditions of Approval, attached please find Union's Interim Monitoring Report for the above-noted project.

Sincerely,

*[original signed by]*

Shelley Bechard  
Administrative Analyst, Regulatory Projects  
Encl.

cc: Z. Crnojacki (Chair, OPCC)  
Regulatory Library

**NPS 48 Hamilton to Milton  
Pipeline Project Interim  
Monitoring Report**

FINAL REPORT



Prepared for:  
Union Gas Ltd.

Prepared by:  
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File No. 160960892  
May 2, 2017

## Sign-off Sheet

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# NPS 48 HAMILTON TO MILTON PIPELINE PROJECT INTERIM MONITORING REPORT

Introduction  
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## 1.0 INTRODUCTION

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board ("the Board") Order EB-2014-0261 granting Union Gas Limited ("Union") "Leave to Construct" the Hamilton to Milton portion of the 2016 Trafalgar Facilities Expansion Program. The pipeline consists of approximately 19.5 km of NPS 48 inch (1219 mm Outside Diameter) natural gas pipeline originating at Unions' existing Hamilton Valve Site near the north east corner of Highway 6 and Carlisle Road and terminating at Union's existing Milton Valve Site located south of Derry Road between Ontario Street and Third Line in Milton, Ontario. A map of the pipeline route is included as Figure 1 in Appendix A.

The requirements for and details of this report are outlined in specific conditions issued by the Board in its decision and Order dated April 30, 2015 and as listed below. Accordingly, the purpose of this Interim Monitoring Report is to detail the fulfillment of these conditions. The complete Conditions of Approval can be found in Appendix B. The Conditions of Approval addressed in this report are as follows:

- 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.

Background  
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## 2.0 BACKGROUND

Union was granted approval to construct the Hamilton to Milton Pipeline Project on April 30, 2015. In the spring, construction was initiated with winter tree clearing which was completed in March, 2016. Mainline construction continued through the summer months and clean-up activities along the pipeline corridor were completed on November 30, 2016. The pipeline was put into service on November 18, 2016. Additional tasks related to archaeology and compensation plantings are planned to occur in the spring of 2017.

Construction generally progressed toward the west from the Milton Station with topsoil stripping and grading, trenching, stringing of new pipeline, welding, joint coating, lowering-in, tie-ins, backfilling, and clean-up. Installation of temporary accesses across watercourses and drilling and blasting of bedrock also occurred as required.

Union will return to the right-of-way (RoW) in spring 2017 to complete the following activities:

- inspect the RoW and repair any subsidence or excessive crowning
- monitor and rehabilitate as necessary adequate bank stability and re-vegetation efforts at all watercourse crossings
- tree/shrub replacement as required
- perform a general overview of the RoW and temporary land use areas
- 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 the evidence filed in EB-2014-0261 except as modified by this Order and these Conditions of Approval."

Union has complied with all conditions imposed by the Board during construction of the pipeline. Union has also restored the land according to the evidence in support of its application and in accordance with all mitigation measures recommended in the Environmental Report (ER) filed by Union.

### **3.2 CONDITION 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."

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

### **3.3 CONDITION 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."

There were three OEB approved changes to the construction plan during this project.

Change 1: Union is proposing changes on the east side of the Centre Line Road. Union requires two additional 110 m x 45m parcels of temporary land use to facilitate the construction of the pipeline.

Change 2: Union requires additional irregular temporary land use to facilitate the construction of the pipeline. Union also requires additional temporary land use for a temporary access lane to the construction site.

Change 3: Union requires additional temporary land use, adjacent to Courtcliffe Park, in order to accommodate construction of the pipeline facilities within the park.

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The three changes are provided in **Appendix C**.

### 3.4 CONDITION 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."

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 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."

#### 3.5.1 Report Circulation

Four (4) copies of this interim monitoring report have been provided to the Board.

#### 3.5.2 Landowner Concerns

Union's Complaint Tracking System (Table 1), which identifies the status of landowner complaints received as a result of pipeline construction activities, was, and continues to be, 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 1 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 should they arise.



### **3.6      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."

In fulfilment of Condition 3.2, Table 2 summarizes the construction effects and general mitigation measures carried out during construction. All mitigation techniques used throughout construction will also be implemented during clean-up activities as required.

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**Table 1: Summary of Landowner Complaints**

Date	Project HM Number	Issue	Resolution	Status
May 3, 2016	HM30	Landowner reported the brush pile left from tree clearing was an eyesore. Wanted it chipped asap and chips to be left for his landscaping project.	Reviewed with Construction, determined soils too wet to bring in equipment/chipper, therefore chipping would be done at fall cleanup when soils drier. Gave landowner two deliveries of other wood chips on Sept 23/16. Brush pile was chipped in the fall at cleanup and chips were left for landowner.	Resolved
June 23, 2016	HM39	Landowner reported dirt bike driving up Right of Way/construction site after working hours.	Reported to Construction Superintendent who notified Security for follow up/monitoring.	Resolved
Aug 10, 2016	HM43	Landowner reported access to back orchard blocked and required for apple picking crew.	Site visit with Chief Inspector and Contractor identified area blocked by topsoil pile. Contractor opened-up area next day and access provided.	Resolved
Aug 31, 2016	HM29	No water from water well.	On Aug 31, 2016, site meeting with hydrogeologist from Stantec Environmental (and well specialist, Lotowater) to assess well. During construction, aquafer was intercepted and dewatering efforts impacted aquafer. On September 1, 2016, Union arranged for an alternate water supply to the landowner's house, directly hooked up, and expedited construction to allow well to re-establish water levels. Water levels within the well rebounded and stable levels returned. On September 27/16, the supplied water system was disconnected and the water supply directly from the well was reconnected to the home. On October 4, 2016, the private well owner stated to Union that they are satisfied with the resolution and the complaint is considered resolved by Union.	Resolved
Sept 30, 2016	HM7	Landowner reported laneway rough with potholes.	Construction graded and applied gravel on Oct 4/16, as soon as returning from a wet weather shutdown.	Resolved
Nov 16, 2016	HM7	Outhouse left at edge of laneway, visible from house.	Outhouse left off easement at laneway edge for supplier to pick up. Supplier returned next day and removed.	Resolved

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**Table 1: Summary of Landowner Complaints**

Date	Project HM Number	Issue	Resolution	Status
Nov 16, 2016	HM42	Landowner concerned that access laneway to field was restored too narrow for tenant farmer's equipment/turning radius.	Construction assessed, had contractor return and widen. Tenant pleased with work.	Resolved
Nov 19, 2016	HM28	Landowner concerned with condition of asphalt at entrance (road allowance), rutting on grass (LO property, road allowance), excess weeds (LO property)	Deficiencies of lawn rutting and weeds noted for 2017 Cleanup by Union; LO to get estimates for asphalt work and submit to Union for review/reimbursement in 2017	Resolved
Sept 23, 2016		The resident requested the stones kicked up from construction be given to him to use as fill on his property. Also, general complaints about construction dust affecting the cleanliness of his property.	As clean-up occurs this year, the resident will be given the stones by our crews. Our Community Liaison also met with the resident to discuss options to address the dust. Those options were accepted.	Resolved
July 16, 2016		General complaints about construction dust affecting the cleanliness of properties, respiratory issues, debris in their pool, enjoyment of property.	Our Community Liaison met with the residents to discuss options to address the dust. Those options were accepted.	Resolved
Aug 5, 2016		Small pick your own farm experiencing issues with dust and road closures	Our Community Liaison met with the resident to discuss options to address these issues. Options were accepted.	Resolved
Aug 29, 2016		General complaints about construction dust affecting the cleanliness of their property.	Our Community Liaison met with the resident to discuss options to address the dust. Those options were accepted.	Resolved

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**Table 1: Summary of Landowner Complaints**

Date	Project HM Number	Issue	Resolution	Status
Sept 2016		Three general complaints about construction dust affecting the cleanliness of their property. Also concerns about construction vibration affecting house structure and potential foundation impact.	Our Community Liaison met with the resident to discuss options to address their concerns. Those options were accepted.	Resolved
Sept 13, 2016		Trees were taken down on the Union Gas right-of-way, which is parallel to the resident's property line. The resident's house overlooks the right of way. Residents expressed concerns over loss of privacy of tree cover and wanted options to restore tree cover on their property to make up for trees lost on Union Gas property.	Our Community Liaison met with the residents to discuss options to address the tree loss. Those options were accepted.	Resolved
Sept 20, 2016		Residents live adjacent to the micro-tunneling on Hwy 25. The 24-hour noise and lighting made the location unlivable.	Our Community Liaison met with the resident and arranged for them to find alternative living accommodations until the project impact was complete.	Resolved
Oct 2016		Twelve general complaints about construction dust affecting the cleanliness of their property.	Our Community Liaison met with the resident to discuss options to address the dust. Those options were accepted.	Resolved
Nov 1, 2016		General complaints about construction dust affecting the cleanliness of their property.	Our Community Liaison met with the resident to discuss options to address the dust. Those options were accepted.	Resolved
Nov 3, 2016		General complaints about construction dust affecting the cleanliness of their property.	Our Community Liaison met with the resident to discuss options to address the dust. Those options were accepted.	Resolved

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**Table 2: Potential Impacts and Mitigation Measures**

Activity	Effects	Mitigation Measures
a) Pre-pipeline Construction	<ul style="list-style-type: none"> <li>Pipeline construction may be disruptive to landowners and farming operations</li> </ul>	<ul style="list-style-type: none"> <li>Prior to pipeline construction, the Lands Relations Agent and Construction Superintendent met with all directly affected landowners to discuss construction and identify any concerns (e.g. Agricultural tiles) that may need to be addressed.</li> </ul>
b) Surveying	<ul style="list-style-type: none"> <li>Surveying may be disruptive to the landowners</li> <li>Crop and woodlot damage</li> </ul>	<ul style="list-style-type: none"> <li>Landowners and tenants were notified of intent to enter their property</li> <li>All crop and woodlot damages were settled with landowners or tenants as required</li> </ul>
c) Access Roads	<ul style="list-style-type: none"> <li>Vehicular traffic may cause soil rutting, compaction or mixing</li> </ul>	<ul style="list-style-type: none"> <li>Permits from Conservation Halton (CH) were obtained and the conditions were followed prior to construction of access roads across watercourses</li> <li>Culverts were utilized in the construction of access roads to ensure existing drainage patterns were maintained</li> <li>Sediment fencing, erosion control matting, and existing vegetation (i.e. grasses) were used alongside watercourses to minimize run-off and erosion.</li> <li>Wood decking mats and geotextile with gravel on top were used to build temporary access roads to provide additional stability, minimize compaction, and minimize topsoil mixing with granular material.</li> </ul>
d) Clearing	<ul style="list-style-type: none"> <li>The removal of trees</li> </ul>	<ul style="list-style-type: none"> <li>Landowners were eligible for the Union Tree Replacement Program</li> <li>Tree cut from woodlots will be replaced at a 2:1 per area basis</li> <li>The harvesting of trees was minimized as much as practical</li> <li>Generally, tree clearing was done outside the migratory bird nesting season (April 1 – August 31). Where individual trees or smaller areas had to be cut during the nesting season, avian specialists were onsite to ensure that no active nests were disturbed.</li> </ul>
e) Grading	<ul style="list-style-type: none"> <li>Grading may be necessary for the construction of access roads or work areas. On agricultural lands, grading has the potential to impact soil productivity by disrupting tile drains and causing soil mixing, rutting and compaction, particularly during wet soil conditions.</li> </ul>	<ul style="list-style-type: none"> <li>Broken agricultural tiles were repaired as per Union Specifications and Drawings</li> <li>Grading was not conducted on wet soils</li> <li>Topsoil was stripped and stockpiled on the edge of the easement on the spoil side of the trench and in some areas on the work side</li> <li>Topsoil stripping was conducted as per Union Specifications</li> <li>Topsoil stripping was monitored to ensure there was adequate separation of topsoil and subsoil</li> <li>Appropriate construction protocols to prevent the spread of Soybean Cyst Nematodes (SCN) were in place and followed</li> </ul>

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**Table 2: Potential Impacts and Mitigation Measures**

Activity	Effects	Mitigation Measures
f) Stringing	<ul style="list-style-type: none"> <li>Stringing trucks may impact soil productivity due to soil compaction, rutting, and mixing</li> </ul>	<ul style="list-style-type: none"> <li>Union Specifications were followed.</li> </ul>
g) Trenching	<ul style="list-style-type: none"> <li>Trenching may disrupt tile drains and cause soil mixing (topsoil and subsoil mixing), which may impact soil productivity</li> </ul>	<ul style="list-style-type: none"> <li>Trenching followed Union Specifications</li> <li>Prior to trenching, topsoil was separated from subsoil as per Union Specifications</li> </ul>
h) Backfilling	<ul style="list-style-type: none"> <li>Improper backfilling may cause topsoil/subsoil mixing</li> </ul>	<ul style="list-style-type: none"> <li>Union Specifications were followed.</li> </ul>
i) Hydrostatic Testing	<ul style="list-style-type: none"> <li>Discharge of hydrostatic test water may cause erosion at the point of discharge</li> </ul>	<ul style="list-style-type: none"> <li>Measures were used (sediment basin on vegetated land) to prevent erosion at the point of discharge</li> <li>A permit to take water (PTTW) was secured from the Ministry of Environment and Climate Change (MOECC) prior to hydrostatic testing and conditions were followed</li> <li>A monitoring program including turbidity measurements as prescribed in the PTTW was undertaken to ensure that water quality had remained within acceptable parameters during testing</li> </ul>
j) Site Restoration	<ul style="list-style-type: none"> <li>Improper site restoration may affect soil productivity</li> </ul>	<ul style="list-style-type: none"> <li>Restoration followed Union Specifications</li> <li>Disturbed areas were restored by re-grading, followed by chisel ploughing and/or sub-soiling and disking</li> <li>Soil compaction was monitored by the Soils Inspector to determine if these methods were suitable</li> <li>The Lands Relations Agent has reviewed and discussed the site restoration measures with the landowner and tenant, so as to identify any concerns or suggestions with regards to these measures</li> <li>Upon completion, the Lands Relations Agent reviewed the area with the landowner and tenant to ensure restoration was completed to their satisfaction</li> </ul>
k) Fuel Storage and Handling	<ul style="list-style-type: none"> <li>Improper fuel storage and handling may cause spillage and possible contamination of soil</li> </ul>	<ul style="list-style-type: none"> <li>Fuel was not stored near watercourses or wetlands (i.e. within 100 m)</li> <li>Fuel storage areas were clearly marked</li> <li>Spill clean-up material (i.e. absorbent pads) were stored on-site and available at all times</li> </ul>

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**Table 2: Potential Impacts and Mitigation Measures**

Activity	Effects	Mitigation Measures
l) Liquid and Solid Waste	<ul style="list-style-type: none"><li>Liquid waste, solid waste, and lubricants must be properly handled, stored and disposed of to avoid potential contamination of the surrounding area</li></ul>	<ul style="list-style-type: none"><li>Liquid and solid wastes were properly stored, handled, and disposed of at an approved location</li><li>The area was cleared of all debris and litter during and after construction</li></ul>
m) General	<ul style="list-style-type: none"><li>Fences</li><li>Mixing, rutting, and compaction</li></ul>	<ul style="list-style-type: none"><li>Fences were repaired to Union Specification</li><li>The area was cleared of all debris and litter during and after construction</li></ul>

### 3.6.1 Monitoring Programs

#### 3.6.1.1 Soil Testing

Prior to construction, soil sampling was conducted on agricultural lands along the pipeline route. Soil samples were taken and analyzed for 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 not present on any of the properties tested.

An SCN construction protocol was enforced to address the arrival of clean machinery onto the project sites and to address the importation of topsoil from elsewhere onto the project.

#### 3.6.1.2 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 the proposed pipeline installation for general pipeline installation, and within 500 m in areas of shallow bedrock conditions. These 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.

Fifty-seven properties received letters offering the well monitoring program. The offer resulted in 32 residences requesting to be entered into the program. Pre-construction samples were taken and sent to an accredited lab for analysis to establish a baseline condition of each well. Water samples were analyzed for general inorganic and bacteriological water quality parameters and the results were compared to the Ontario Drinking Water Standards (ODWS) established by the MOECC.

Upon receiving the results, Stantec immediately notified any residents whose water exceeded the MOECC ODWS Maximum Acceptable Concentration (MAC) for any tested parameter. Water quality results indicated exceedances for total coliforms, E. coli, lead, nitrate and uranium within at least one sample. Stantec provided the residents in the program with a summary letter of the results and with the contact information for the public health unit in case of further questions.

On August 30, 2016, an issue became known to Union regarding a landowner complaint of the interference of a domestic water well supply at the property identified as HM 28. The house had been included in the water well monitoring program prior to the complaint being filed. The



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complainant noted that the well was not providing the same quantity of water as it was prior to pipeline construction in the area. Stantec was engaged to investigate the issue and to propose appropriate solutions.

Potable water was supplied to the residence beginning September 1, 2016. Preliminary review suggested that construction activity in the area may have caused the temporary decline in water levels, but water levels may have also been impacted by seasonal lows / lack of precipitation. The construction activity in the area was completed at the time and no additional dewatering was planned. Water levels within the well rebounded and on September 27, 2016, the supplied water system was disconnected and the water supply from the well was reconnected to the home. In October 2016, the private well owner stated to Union that they are satisfied with the resolution and the complaint is considered resolved by Union.

### 3.6.1.3 Watercourse Monitoring

Thirty-six watercourses were crossed during the construction. Fourteen watercourses were defined as cold water fisheries, nine were defined as warm water fisheries and thirteen were dry or offline ponds. Prior to construction, field research was completed and permits from CH and the Ministry of Natural Resources and Forestry (MNRF) were obtained where required. During construction, Union's onsite environmental inspection staff were on-site at all watercourse crossings for the duration of the crossing to direct and monitor the contractor's watercourse crossing crew.

All watercourses were crossed using methods approved by DFO and CH. All watercourses with flow at the time of the crossing were crossed using an isolated dry crossing technique (dam & pump) except for Sixteen Mile Creek which was crossed using an isolated jack and bore technique. The jack and bore allowed for a smaller receiving hole on the sensitive side of the creek. As well, both the boring machine and line pipe were on the less sensitive side of the creek. The dry watercourses were crossed using an open cut method with dam materials and pumps onsite in the event of flow developing.

During the undercrossing, on September 21, 2016, a hole developed above the boring operation in the bed of Sixteen Mile Creek. The construction was halted and the MNRF and CH were notified. Representatives from MNRF and CH attended a meeting on site on September 22, 2016 to discuss the issues and remedial actions.

It was decided by the Agencies that the creek crossing area should be isolated with wildlife removed from the isolated area so that the hole could be repaired and stabilized prior to re-opening the watercourse. The work was completed on September 22-23, 2016 and the site and its condition was subsequently re-inspected by CH and MNRF who approved the measures completed.

All watercourses were protected prior to, during and following construction with sediment fencing. Immediately following pipeline crossings and immediately following temporary access



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removals, disturbed areas adjacent to the watercourses were seeded with CH approved seed mixtures and the banks were protected with erosion control blanket and sediment fencing.

All watercourse crossings were monitored during construction by an Environmental Inspector and all watercourses will be inspected in the spring of 2017 to ensure bank stability and vegetation re-establishment and to implement further mitigation measures as required. All watercourses were also monitored after excessive rainfall events to verify the condition and effectiveness of the sediment fencing.

### 3.6.1.4 Species at Risk (SAR)

Prior to construction, Stantec completed detailed habitat assessments and field surveys to confirm habitat and species occurrences of SAR in the Project Area. During the 2016 construction period, additional habitat assessments and field surveys were conducted where vegetation clearing was proposed outside the originally-surveyed Project Area. As well, areas listed as Silver Shiner fish and American Eel habitat were rehabilitated.

#### Butternut Tree

One Butternut tree was identified as being off, but within 25m, of the RoW. To avoid having the tree impacted by the 2016 construction, mitigation measures were developed and followed which entailed separating the tree from the RoW by orange exclusion fence to identify the area as a no-go zone. No impact on the tree occurred as the result of the construction project.

During the construction in the event additional lands were required, specialists were engaged to conduct sweeps for Butternut trees. Stantec conducted a survey on December 7, 2016, to search for the presence of Butternut trees within a portion of the Project Area proposed for vegetation removal. No Butternut trees were observed.

#### Bats: Little Brown Myotis and Northern Myotis

Pre-construction habitat surveys were conducted for bats. Trees identified as bat habitat on the edge of the RoW were identified with orange exclusion fencing and left in place.

During construction, Stantec conducted surveys to search for the presence of candidate bat maternity roost trees within portions of the Project Area proposed for vegetation removal. Two suitable trees were identified – an 80 cm DBH Red Oak (*Quercus rubra*) and a 28 cm DBH White Birch (*Betula papyrifera*). These trees were marked to be retained and were not damaged during construction.

#### Silver Shiner

Sixteen Mile Creek was identified as having suitable habitat for Silver Shiner thus requiring an Endangered Species Act (ESA) permit from the MNRF. In addition, a trenchless jack and bore technique was designed for the crossing. Other than the incident described in section 3.6.1.3, construction around Sixteen Mile Creek was satisfactory to Agencies and Union.

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### American Eel

Limestone Creek was identified as having suitable habitat for the American Eel. A Letter of Advice (LOA) was issued by the MNRF for this watercourse crossing. No issues arose during the crossing and the creek was satisfactorily restored once the pipeline was installed.

#### 3.6.1.5 Tree Removal

The *Migratory Birds Convention Act* (MBCA) prohibits the killing or capturing of migratory birds, as well as any damage, destruction, removal or disturbance of active nests (i.e. incidental take). In order to avoid contravention of the MBCA, vegetation clearing is not recommended during the primary nesting period (PNP; April 10 to August 12). Furthermore, in a LOA provided to Union by MNRF, Union was advised to extend the prohibited vegetation clearing window to avoid potential impacts to roosting bat SAR. To the extent possible, tree removal along the pipeline corridor was conducted outside the extended sensitive wildlife period from April 1 to August 31. Where tree removal occurred within this period, pre-clearing bird nest searches were conducted by qualified personnel within 7 days of the proposed tree removal.

Pre-clearing nest searches were conducted on April 27 and July 26, 2016. On April 27, 2016 two American Robin nests were observed within the project footprint. A 5m radius around each nest was marked to prevent disturbance of the nest until the young birds had fledged. On July 26, 2016, a nest of American Goldfinch was observed within the project footprint and a 6 m radius around this nest was marked. In a follow-up survey on August 15, 2016, this nest was observed to be empty, and vegetation clearing was allowed to continue.

#### 3.6.1.6 Tree Replacement Program

This program is designed as a Union 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 were given the option to have native tree species of their choice planted on their property in the spring of 2017.

#### 3.6.1.7 Archaeological Monitoring

Licensed archaeologists were engaged to conduct Stage 1, 2, and 3 Archaeological Assessments along the pipeline corridor prior to construction in accordance with the Ministry of Tourism, Culture, and Sport (MTCS) guidelines to identify potential archaeological sites and mitigate potential impacts. Assessment Reports were submitted to the MTCS and were reviewed and accepted into the Ontario Public Register of Archaeological Reports. During the archaeology studies for the project, there were four archaeological sites identified on the RoW: Munroe Site (AiGx-415), Pipeline Site (AiGx-12), Whittaker site (AiGx-388), Rattlesnake Point Site (AiGx-172). Further assessments were conducted and mitigation appropriate to each site was developed to provide protection during construction.

## **NPS 48 HAMILTON TO MILTON PIPELINE PROJECT INTERIM MONITORING REPORT**

Potential Impacts and Mitigation  
May 2, 2017

### **Munroe Site (AiGx-415)**

The studies done at the Munroe site resulted in active Stage 4 site investigations during 2015 and 2016. Prior to construction, areas of the property were cleared and other areas of interest remain for future assessment. Mitigation included exclusion fencing and the attendance of aboriginal site monitors during active construction in the immediate area. The archaeological investigation at the Munroe Site is planned to continue in 2017.

### **Pipeline Site (AiGx-12)**

A Stage 4 archaeological assessment was conducted at the Pipeline Archaeological Site in 2015-2016. The site was cleared of archaeological interests and an exclusion fence was erected at the start of construction in that area to identify the no-go zone. There were no impacts to the adjacent non-surveyed areas.

### **Whittaker Site (AiGx-388)**

The Whittaker site was investigated to the Stage 3 level and was subsequently cleared of archaeological potential prior to the initiation of construction activities in the area. Protective exclusion fencing was erected along the edge of the RoW to avoid inadvertent off-easement impacts. There were no impacts to the adjacent non-surveyed areas.

### **Rattlesnake Point Site (AiGx-172)**

The RoW at the Rattlesnake Point Site was assessed and investigated in 2015-2016. It was determined as having no further cultural heritage value or interest before construction in the area began. To protect the archaeological site lands adjacent to the RoW, exclusionary fencing was erected to identify the area.

#### **3.6.1.8 Heritage Buildings**

In 2015, a Cultural Heritage assessment was conducted along the approved pipeline route. In all, twenty properties were assessed. The conclusion of the report was that 4 properties held significant cultural heritage: 217 Carlisle Road, 1571 Centre Road, 1521 Milborough Line, 1094 Derry Road. The MTCS accepted the assessment and required a 60m buffer around the properties buildings. Exclusion fencing was erected at the locations. No impacts to the heritage structures occurred.

#### **3.6.1.9 Blasting**

To attain proper trench depth, blasting was required along sections of the RoW and followed Union's Specification for Rock Excavation. Most of the bedrock removed was to create the shallow trench into the hill approximately 150m west of McNiven Road. No complaints were received as a result of blasting.

## NPS 48 HAMILTON TO MILTON PIPELINE PROJECT INTERIM MONITORING REPORT

Summary  
May 2, 2017

### 4.0 SUMMARY

This Interim Monitoring Report has been prepared as per condition 3.1 in the Board Order EB-2014-0261. The report provides an outline of Unions' compliance with the commitments, the measures implemented during construction to minimize disturbance to the environment, and a description of Union's monitoring programs. It is anticipated that these measures will effectively eliminate any long-term impacts to the environment.

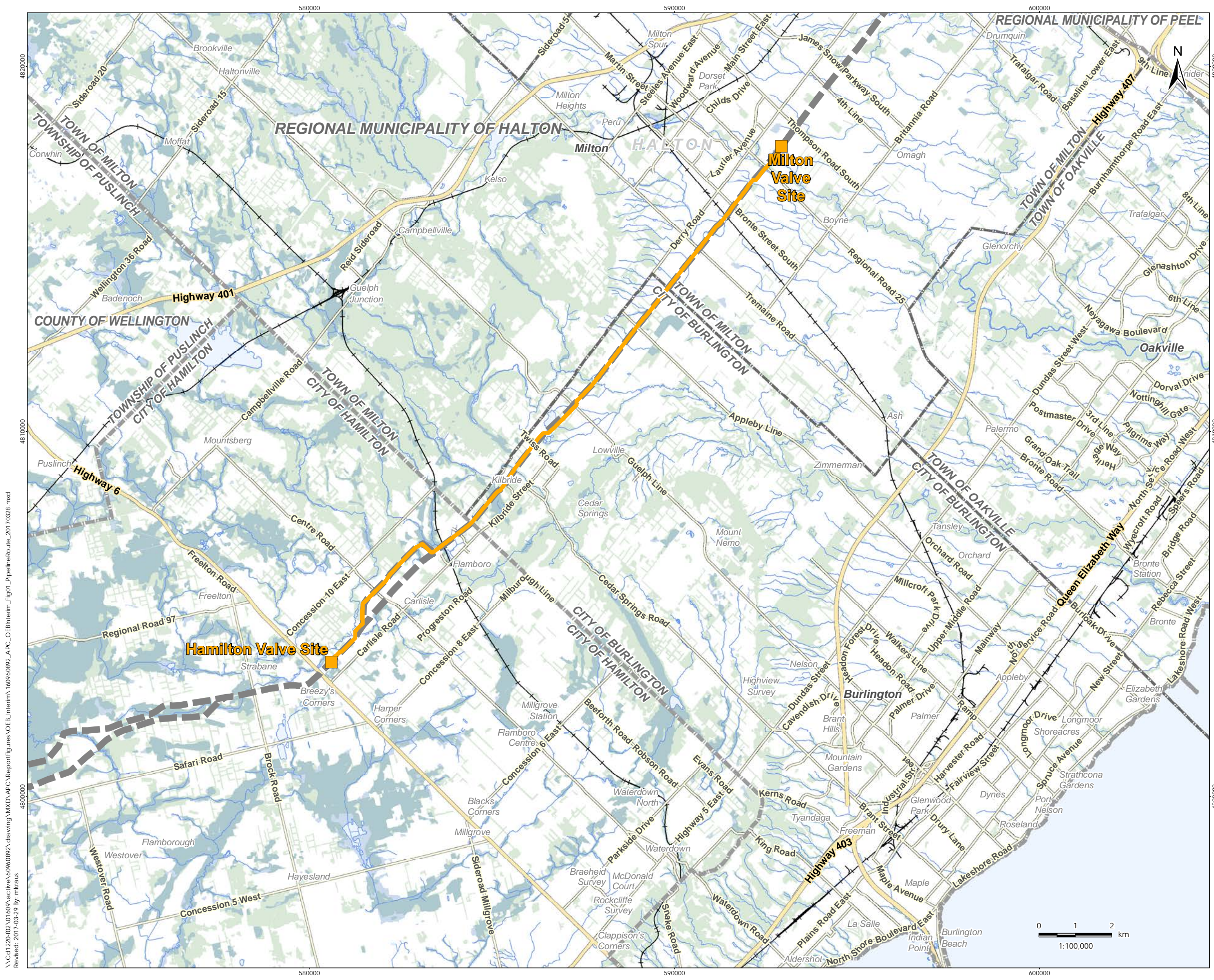
A review of the pipeline route is planned to be undertaken in the spring of 2017 to identify areas along the pipeline corridor that require additional clean-up efforts and remedial actions. Clean-up at these locations are planned to be completed in spring and summer of 2017.

Tree replacement to compensate properties where trees have been cleared due to construction will be completed in 2017.

A Final Monitoring Report will be prepared to evaluate the success of the restoration measures and identify any areas that require additional restoration, if necessary.

## **APPENDIX A: PIPELINE ROUTE MAP**





- Legend
- Existing Station
  - Preferred Route
  - Existing Dawn Parkway Pipeline System
  - Highway
  - Major Road
  - Railway
  - Municipal Boundary, Upper
  - Municipal Boundary, Lower
  - Watercourse
  - Waterbody
  - Wetland
  - Wooded Area



- Notes
- Coordinate System: NAD 1983 UTM Zone 17N
  - Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.

Client/Project

Union Gas Limited  
Dawn Parkway System Expansion  
Hamilton to Milton Section

Figure No.  
1

Title

Pipeline Route

\\C01220-102-01609\active\60960892\drawing\MXD\APC\ReportFigures\OEB\_Interim\160960892\_APC\_OEBInterim\_Fig01\_PipelineRoute\_20170328.mxd  
Revised: 2017-03-29 By: mkras

March 2017  
160960892



## **APPENDIX B: ONTARIO ENERGY BOARD CONDITIONS OF APPROVAL**





# **ONTARIO ENERGY BOARD**

## **UNION GAS LIMITED – DAWN PARKWAY 2016 EXPANSION PROJECT**

### **DECISION AND ORDER**

**EB-2014-0261**

**April 30, 2015**



**EB-2014-0261**

**IN THE MATTER OF** the Ontario Energy Board Act, 1998,  
S.O. 1998, c.15, Schedule B (the Act);

**AND IN THE MATTER OF** an application by Union Gas  
Limited for an order or orders granting leave to construct natural  
gas pipeline and ancillary facilities in the City of Hamilton, the City  
of Burlington, and the Town of Milton;

**AND IN THE MATTER OF** an application by Union Gas  
Limited for an order or orders granting leave to construct  
a compressor station in the Municipality of Middlesex Centre;

**AND IN THE MATTER OF** an application by Union Gas  
Limited for an order or orders for pre-approval of the recovery  
of the cost consequences of all facilities associated with  
the development of the natural gas pipelines and ancillary  
facilities and the compressor station.

**Before:** Marika Hare  
Presiding Member

Ellen Fry  
Member

## **2016 Dawn to Parkway Expansion Project Decision and Order**

### **Introduction and Summary**

Union Gas Limited (Union) has filed an application with the Ontario Energy Board (OEB) for approval of a major system expansion. This expansion includes a natural gas pipeline, compressor station and related facilities. Union submitted that the expansion

is needed to respond to the request for additional transportation services on the Dawn Parkway pipeline system as a result of changing North American gas supply dynamics.

The Act requires the OEB to consider the public interest when deciding whether to approve the construction of a project such as this. For the reasons set out below, the OEB concludes that the expansion is in the public interest and the project is approved subject to a number of conditions, as specified in this Decision and Order. These include practices to mitigate the impact of the pipeline on the land where it is constructed and also a revision to the form of agreement offered to affected landowners.

## **The Application**

Union has applied for approval under section 90 of the Act to construct 20 kilometers of pipeline and associated facilities from its Hamilton valve site to its Milton valve site, in the City of Hamilton, the City of Burlington, and the Town of Milton. The application also seeks approval, under section 91 of the Act, for the construction of a new compressor (the Lobo C compressor) and modifications to the existing facilities at the Lobo compressor station in the Municipality of Middlesex Centre. The proposed facilities will provide incremental capacity of 442,770 GJ/d on Union's Dawn Parkway pipeline system.

Union has also requested approval under section 36 of the Act to recover the costs of the project from ratepayers and to establish an associated deferral account to record any differences between the actual revenue requirement and the revenue requirement included in rates (2016 Dawn Parkway System Expansion Deferral Account).

Union submitted that the costs of the project meet the capital pass-through criteria previously approved by the OEB<sup>1</sup>. All proposed facilities are expected to be in service in November 2016. A map of the project area is attached as Appendix A.

As part of this application, in accordance with section 97 of the Act, the OEB is also required to approve the form of agreement offered to affected landowners.

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<sup>1</sup> 2014-2018 Incentive Regulation Mechanism proceeding (EB-2013-0202)

## **The Process**

The proceeding included an interrogatory phase, a settlement process and an oral hearing. There were a number of intervenors who participated in this proceeding, and these parties are listed in Appendix B.

As a result of settlement negotiations a proposed partial settlement agreement was filed on February 27, 2015. All but two issues were settled. The first unsettled issue concerns pipeline abandonment. The second issue concerns what practices should be taken to mitigate the impact on the land where the pipeline is constructed.

Both of these issues were raised by the Gas Pipeline Landowners of Ontario (GAPLO). Union argued that GAPLO is not representative of the landowners affected by this project, because it focuses on agricultural land and the only affected landowner who is a member of GAPLO owns residential property. GAPLO indicated that it represents landowners directly affected by Union's pipelines generally and hence has an interest in ensuring that Union's construction methodologies and environmental protection measures are held to the highest standards by the OEB. The OEB accepted GAPLO as an intervenor in this proceeding because it agrees that GAPLO has an interest.

## **The Settlement Agreement**

During the presentation of the settlement agreement at the hearing on March 5, 2015, the OEB asked Union to clarify certain information. All the parties that endorsed the settlement agreement agreed to the clarifications put forward by Union at the hearing. Union filed an updated settlement agreement incorporating some of these clarifications on March 6, 2015.

## **Board Findings**

In considering whether a proposed project such as this is in accordance with the public interest, the OEB normally considers the following criteria:

- Need and alternatives
- Cost, economic evaluation, and rate impact
- Environmental, technical and safety issues

- Landowner matters including the form of agreement offered to each owner of land affected by the approved route or location

In this proceeding, the OEB also considered whether the project meets the capital pass-through criteria previously approved by the OEB<sup>2</sup>.

The OEB considers that the updated settlement agreement is in the public interest in accordance with the criteria above, subject to the conditions indicated below. This agreement should be interpreted in accordance with Union's comments at the hearing where the OEB sought clarification of a number of items in the original agreement. The approved settlement agreement is attached as Appendix C to this Decision and Order. The OEB will also approve the draft accounting order filed by Union to establish the 2016 Dawn Parkway System Expansion Deferral Account.

The OEB will now address the two outstanding issues referred to above.

### **Pipeline Abandonment**

Union filed a form of easement agreement applicable to all landowners directly impacted by the pipeline location. GAPLO objected to the proposed pipeline abandonment clause (Clause 1) in Union's form of easement agreement.

At issue is whether Union or the landowners should have the authority to decide on whether the pipeline should be left in the ground or removed at the time of abandonment.

Union's proposed clause would give Union the option to remove the pipeline, or not, at the time of abandonment. GAPLO's proposal would give a landowner the option to require that the pipeline be removed at the time of abandonment. GAPLO argued that the absence of regulations concerning pipeline abandonment in Ontario puts landowners at risk for any potential impacts to their land associated with abandoned pipelines that are not removed. GAPLO proposed language to replace Union's proposed Clause 1 which is identical to what was approved by the OEB in the Strathroy to Lobo project<sup>3</sup> GAPLO also requested that this provision apply to all pipelines on the Dawn-Trafalgar system.

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<sup>2</sup> 2014-2018 Incentive Regulation Mechanism proceeding (EB-2013-0202)

<sup>3</sup> EB-2005-0550

OEB staff suggested that an appropriate approach may be the appointment of a third party independent consultant to determine whether a pipeline should be removed, in accordance with regulatory requirements and standards at the time of abandonment. OEB staff submitted this may be a more balanced approach.

## Findings

The OEB agrees with some of the arguments made by both Union and GAPLO. Union argued that it would not be appropriate for the OEB to mandate today what will happen if and when the pipeline is abandoned, which may occur many decades from now. Union took the position that the appropriate time for decisions to be made as to the mode of abandonment should be at the time of abandonment. Union argued that abandonment regulations and practices will undoubtedly evolve and decades from now will be different from today's best practices. Union argued that the issue of abandonment may also be addressed by other jurisdictional authorities, such as the Niagara Escarpment Commission. The OEB agrees with all these points. GAPLO and OEB staff do not disagree with making the decision at the time of abandonment; but disagree with Union on who should make the final determination with respect to the abandonment method. GAPLO also submitted that the OEB approved a form of agreement that gave the landowner authority to decide the method of abandonment in three previous applications to the OEB. At the hearing, Union referred to the National Energy Board's (NEB) abandonment requirements as well as practices of the Ontario Technical Standards and Safety Authority (TSSA).

GAPLO argued that the Ontario regime with respect to pipeline abandonment is quite different from the NEB jurisdiction over pipeline abandonment procedures. GAPLO submitted that in Ontario there is a lack of regulatory oversight on abandonment. In contrast, the NEB approves federal pipeline abandonment plans.

Union argued that, since the OEB Act does not have provisions pertaining to pipeline abandonment, the TSSA Act and Regulation should apply. OEB staff submitted that contrary to Union's submission, there do not appear to be any enforceable provisions dealing with pipeline abandonment. OEB staff disagreed with Union that, "it would be inappropriate and wrong for the Board to step in where the TSSA has the jurisdiction

and is clearly going about exercising it.”<sup>4</sup> OEB staff provided a TSSA Pipeline Abandonment Checklist (TSSA Checklist) and noted that compliance is not enforceable.

To further support its argument that the TSSA has jurisdiction over abandonment, Union referred to the CSA draft standard Z662 (CSA standard). The CSA standard would require that a pipeline operator develop an abandonment plan which would include the basis for the chosen abandonment method. However, the clause on abandonment has not been adopted at this time given that the CSA standards are currently only in draft form. Union noted that the draft clause specifies that the abandonment plan should be developed with consideration of regulatory requirements, landowner consultation, effects on land, water, roads and railways crossings, current and future land use, safety and environmental damage risks by ground subsidence, soil mixing or contamination, groundwater contamination, erosion, and the creation of water conduits. OEB staff noted that at this time, there is no certainty on whether the CSA draft standards will become an enforceable requirement. GAPLO submitted that the TSSA does not have exclusive jurisdiction over pipeline abandonment that would preclude the OEB from addressing the issue. Union did not dispute that.

The OEB agrees with GAPLO and OEB staff’s position that there is no enforceable requirement to obtain regulatory approval on the abandonment method.

The OEB agrees with the parties that the TSSA does not have exclusive jurisdiction over pipeline abandonment.

The overriding consideration for the OEB is the control the landowner should have with respect to how the land is to be treated upon pipeline abandonment. The OEB heard evidence from Union that leaving an abandoned pipeline in place would be less disruptive to the land than removing it. The OEB also heard evidence from GAPLO that this might be true over the short term, but that over the longer term impacts such as subsidence could be more disruptive if the pipeline were not removed. GAPLO witnesses testified that for agricultural land the condition of the land is fundamental. Their testimony indicated that this is not just a question of a farmer’s passion for the land; it is that the condition of the land is fundamental to the farmer’s livelihood.

The OEB finds that the landowner should have the right to decide whether an abandoned pipeline should be physically removed from the ground or dealt with through whatever other means of abandonment may be proposed by Union. Once construction

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<sup>4</sup> OEB staff submission, March 11, 2015, page 3.

of a pipeline on a piece of property is approved, the landowner is giving up certain rights to Union, as a distribution utility, in the public interest. However, should that pipeline no longer be needed, the landowner should be able to make the fundamental decision about how the land is to be restored.

This is not a debate about deciding in advance what should be done with a pipeline that is abandoned at a point potentially decades from now. The issue is who should make the decision at that time.

The OEB also notes that, as pointed out by GAPLO, the OEB approved a form of agreement that gave the landowner authority to decide the method of abandonment in three previous applications to the OEB.<sup>5</sup>

Given the fact that any pipeline abandonment could occur many years in the future, the OEB finds that the abandonment rights are best incorporated in an easement agreement, which will be registered on the land title and hence readily accessible regardless of the passage of time.

While the OEB is approving GAPLO's request in this proceeding, the OEB does not accept GAPLO's submission that the OEB should address in this proceeding the issue of abandonment for all pipelines on the Dawn-Trafalgar system. The OEB's decision in this proceeding is limited to the lands affected by the specific project for which Union is seeking approval.

### **Construction and Land Restoration Practices**

Union filed as part of the settlement agreement a proposed Letter of Understanding to be entered into with affected landowners. This agreement specifies Union's commitments to adhere to certain construction and land restoration practices. Union and GAPLO agreed upon a number of construction and land restoration practices prior to the hearing. However, GAPLO proposed that the OEB order specific changes to the Letter of Understanding on matters where Union and GAPLO disagreed.

In advance of the oral hearing, GAPLO filed a table setting out the changes requested to the Letter of Understanding<sup>6</sup>. The changes proposed by GAPLO were essentially the

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<sup>5</sup> EB-2005-0550, EB-2007-0633 and EB-2009-0422

<sup>6</sup> Exhibit K1.3.



same as the Letter of Understanding used by Union on three previous pipeline construction projects<sup>7</sup>. During the oral hearing, Union agreed to some of the proposed changes and GAPLO indicated that it would be withdrawing some of its requests.

Although the construction and land restoration practices requested by GAPLO could be ordered by the OEB as individual conditions of approval, GAPLO argued that these items would be more effectively instituted by approving specific amendments to the wording of the Letter of Understanding.

Union argued that the Letter of Understanding should not be subject to OEB approval on the basis that the OEB has declined to do so in the past, and in its view lacks jurisdiction in certain respects. Union also argued that the damages referred to in measure (v) below are a term that should be negotiated with individual landowners. OEB staff indicated that they were not convinced that the OEB has the jurisdiction to approve the Letter of Understanding itself. OEB staff submitted that the OEB in this case can approve particular terms of the Letter of Understanding even if it declines to approve its entire form and content.

## Findings

As indicated above, a number of construction and land restoration practices were agreed upon prior to the hearing. During the oral hearing, Union agreed to some of the changes proposed by GAPLO. The remaining unsettled issues are:

- i) Overwintering of stripped topsoil at the request of the landowner
- ii) Where topsoil is overwintered, restoration of identifiable subsidence in excess of 2 inches with the importation of topsoil
- iii) Stone-picking by hand and/or with a mechanical stone-picker of stones down to a size of 2 inches or larger in the first two years following construction and thereafter where there is a demonstrable need
- iv) Landowner approval of the source of any topsoil to be imported by Union to the landowner's property

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<sup>7</sup> Proceedings EB-2005-0550, EB-2007-0633 and EB-2009-0422

- v) Payment of damages by Union where Union conducts construction activities in wet soil conditions

For each of the practices described in (i) to (iv), there was evidence from Union that the specific modifications proposed by GAPLO are impractical, ineffective or not desirable in all situations, and from GAPLO that they are necessary and appropriate in some or all instances.

Mr. Kraayenbrink of GAPLO testified about the importance of topsoil to a farmer's livelihood: "Topsoil, for us, is our life's blood. That is how we put food on the table for our families. And when a company has the right--- when we have no right to go and have an option of how to best protect our topsoil, it is appalling in this day and age."

In view of the economic importance of topsoil to farmers, the OEB considers that the landowner should be entitled to decide if the measures described in (i) to (iv) should be taken, and directs Union to reflect this in the agreements it offers to affected landowners. With respect to the measure described in (v), the OEB agrees with Union that the issue of damages for any work conducted in wet soil is an issue to be negotiated between Union and individual landowners.

Accordingly, the OEB requires Union to offer to the affected landowners an agreement that contains the practices agreed to by Union and GAPLO prior to and during the hearing, and those ordered by the OEB in this Decision and Order and described in items (i) to (iv) above.

### **Conditions of Approval**

Union has agreed to the standard OEB conditions of approval for sections 90 and 91 applications as proposed by OEB staff, except that it has asked that it be given until December 31, 2017 to start construction. The updated settlement agreement reflects this. GAPLO did not dispute these proposed conditions of approval, including the amended date to start construction. The OEB approves the conditions of approval proposed by OEB staff and the amended date to start construction. As discussed above, some additional conditions of approval are stipulated by the OEB.

**IT IS ORDERED THAT:**

1. Union Gas Limited shall abide by the conditions of approval set out in Appendix D of this Decision and Order.
2. Union Gas Limited shall file a form of easement agreement that reflects the OEB's findings in this Decision and Order concerning abandonment within seven days of the issuance of this Decision and Order.
3. Union Gas Limited shall offer to affected landowners an agreement that incorporates the construction and land restoration practices agreed to between Union and GAPLO prior to and at the hearing, plus those ordered by the OEB in this Decision and Order. Union Gas Limited shall file the agreement within seven days of the issuance of this Decision and Order.
4. Intervenor shall file with the OEB and forward to Union Gas Limited their cost claims within 7 days from the date of this Decision and Order.
5. Union Gas Limited shall file with the OEB and forward to intervenors any objections to the claimed costs within 14 days from the date of this Decision and Order.
6. Intervenor shall file with the Board and forward to Union Gas Limited any responses to any objections for cost claims within 21 days of the date of this Decision and Order.
7. Union Gas Limited shall pay the Board's costs incidental to this proceeding upon receipt of the OEB's invoice.

All filings with the OEB must quote the file number EB-2014-0261, and be made through the OEB's web portal at <https://www.pes.ontarioenergyboard.ca/eservice/>, and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must be received by the OEB by 4:45 p.m. on the stated date. Parties should use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at [www.ontarioenergyboard.ca](http://www.ontarioenergyboard.ca).

If the web portal is not available, parties may e-mail their documents to the attention of the OEB Secretary at BoardSec@ontarioenergyboard.ca. All other filings not filed via the OEB's web portal should be filed in accordance with the OEB's *Practice Directions on Cost Awards*.

**DATED at Toronto, April 30, 2015**

**ONTARIO ENERGY BOARD**

*Original signed by*

Kirsten Walli  
Board Secretary

## **Appendix A**

### **Map of the Project**

**EB-2014-0261**

**DATE: April 30, 2015**

# UNION GAS LIMITED LOBO COMPRESSOR STATION PROJECT

**Lobo Compressor Station**

Sinclair Drive

Lamont Drive

Gold Creek Drive

Melrose Drive

Oxbow Drive

Komoka Road

Glendon Drive

Gideon Drive

Vanneck Road

8 Mile Road

Medway Road

Sunningdale Road West

Boston Drive

Gainsborough Road

MUNICIPALITY OF MIDDLESEX CENTRE  
CITY OF LONDON

**CITY OF  
LONDON**



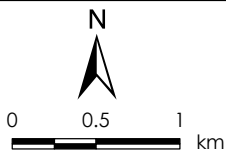
Compressor Station



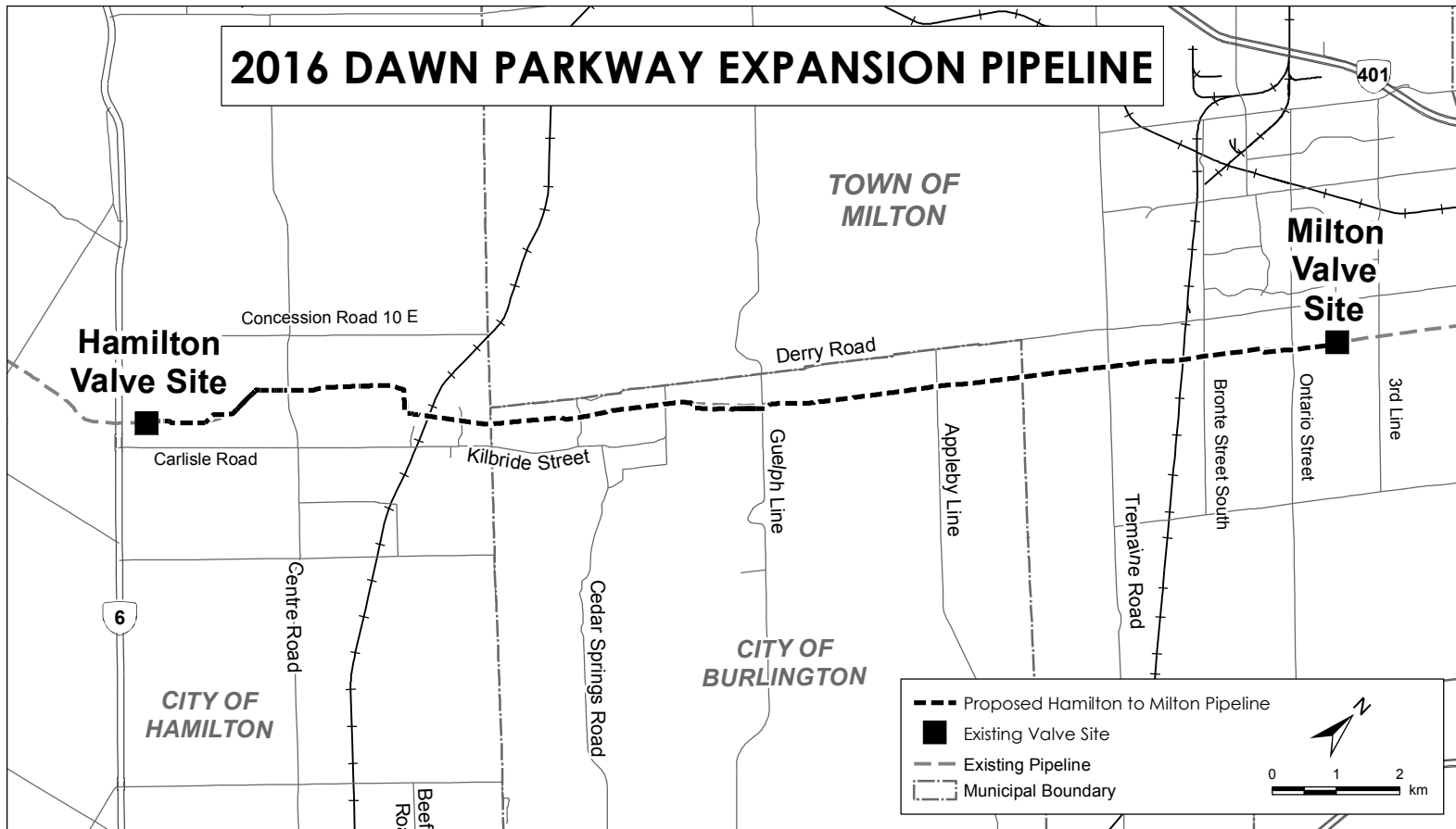
Dawn-Parkway System



Municipal Boundary



# 2016 DAWN PARKWAY EXPANSION PIPELINE



## **Appendix B**

### **List of Intervenorors**

**EB-2014-0261**

**DATE: April 30, 2015**



**Union Gas Limited  
EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

April 30, 2015

**APPLICANT**

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

- 2 -

April 30, 2015

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

- 3 -

April 30, 2015

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

- 4 -

April 30, 2015

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

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April 30, 2015

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

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April 30, 2015

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

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April 30, 2015

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**Union Gas Limited**

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**APPLICANT & LIST OF INTERVENORS**

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April 30, 2015

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

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April 30, 2015

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**Union Gas Limited**

**EB-2014-0261**

**APPLICANT & LIST OF INTERVENORS**

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April 30, 2015

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**Appendix C**

**Settlement Agreement**

**EB-2014-0261**

**DATE: April 30, 2015**

**EB-2014-0261**  
**UNION GAS LIMITED**  
**SETTLEMENT AGREEMENT**  
**Filed February 27, 2015**  
**Updated March 6, 2015**

**EB-2014-0261**  
**SETTLEMENT AGREEMENT**

This Settlement Agreement (the “Agreement”) is for the consideration of the Ontario Energy Board (the “Board”) in its determination, under Docket No. EB-2014-0261 for Union Gas Limited (“Union”).

On September 11, 2014, Union filed an application with the Board seeking approval for its 2016 Dawn Parkway Expansion Project (“the Project”). Subsequent to this, on September 30, 2014, Union filed its pre-filed evidence in support of the application. As stated in its evidence, the Project involves the installation of a new 44,500 ISO HP Lobo C Compressor plus modifications to existing facilities at the Lobo Compressor Station and, the construction of approximately 20 km of NPS 48 pipeline extending from the Hamilton Valve Site to the Milton Valve Site. These facilities will provide incremental capacity of 442,770 GJ/d on Union’s Dawn Parkway System with an in-service date of November 2016. The total estimated cost to construct the Project is \$415.7 million.

By Procedural Order No. 2 dated January 29, 2014, the Board scheduled a Settlement Conference on February 9, 2014. The Settlement Conference was duly convened, in accordance with Procedural Order No.2, with Gail Morrison as facilitator. The purpose of the Settlement Conference was to seek agreement on some or all of the issues identified in the Board’s Decision on Issues List dated February 6, 2014.

In Procedural Order No. 1 in this proceeding (dated November 18, 2014), the Board granted intervenor status to all parties as listed in Appendix A of Procedural Order No. 1. The following parties participated in the Settlement Conference:

Association of Power Producers of Ontario (“APPrO”)  
Building Owners and Managers Association of the Greater Toronto Area (“BOMA”)  
Canadian Manufacturers & Exporters (“CME”)  
Federation of Rental-Housing Providers of Ontario (“FRPO”)  
Gas Pipeline Landowners of Ontario (“GAPLO”)  
Kitchener Utilities (“Kitchener”)  
London Property Management Association (“LPMA”)  
Ontario Greenhouse Vegetable Growers (“OGVG”)  
School Energy Coalition (“SEC”)  
TransCanada PipeLines Limited (“TCPL”)  
Union Gas Limited (“Union”)  
Vulnerable Energy Consumers Coalition (“VECC”)

These issues cited in the Board’s February 6, 2014 Decision include:

1. Are the proposed facilities needed?
2. Do the proposed facilities meet the Board's economic tests as outlined in the Filing Guidelines on the Economic Tests for Transmission Pipeline Applications, dated February 21, 2013, as applicable?
3. What are the potential short-term and long-term rate impacts to customers? Are these costs and rate impacts to customers appropriate?
4. What are the facilities and non-facilities alternatives to the proposed facilities? Have these alternatives been adequately assessed and are any preferable to the proposed facilities, in whole or in part?
5. Do the facilities address the OEB Environmental Guidelines for Hydrocarbon Pipelines as applicable?
6. Are there any outstanding landowner matters for the proposed facilities with respect to routing and construction matters? For greater clarity, landowners include parties from whom permits, crossing agreements and other approvals are required.
7. Is the form of easement agreement offered by Union or that will be offered by Union to each owner of land affected by the approved route or location appropriate?
8. Are the proposed facilities designed in accordance with current technical and safety requirements?
9. Has there been adequate consultation with other potentially affected parties?
10. Does the project meet the capital pass-through mechanism criteria for pre-approval to recover the cost consequences of the proposed facilities?
11. If the Board approves the proposed facilities, what conditions, if any, are appropriate?

The result of the settlement negotiations between Union and stakeholders (the "Agreement") was a partial settlement in that the Agreement does not settle all issues in this proceeding. Issues 1, 2, 3, 4, 5, 8, 9 and 10 were completely settled. All remaining issues were unsettled, with partial settlements as noted below. These unsettled issues are specific to interests raised by GAPLO.

Consistent with the Board's Settlement Conference Guidelines (the "Guidelines"), the parties to the Agreement acknowledge and agree that none of the completely settled provisions of this Agreement are severable. If the Board does not accept the completely settled provisions of the Agreement in their entirety, there is no Agreement (unless the parties agree that any portion of the Agreement the Board does accept may continue as a valid Agreement).

It is further acknowledged and agreed that parties will not withdraw from this Agreement under any circumstances except as provided under Rule 32.05 of the Board's Rules of Practice and Procedure, interpreted as if this Agreement were the result of a Board-ordered settlement conference.

The parties agree that all communications between parties during the Settlement Conference, and all documents exchanged during the conference which were prepared to facilitate settlement discussions are, unless subsequently placed on the record by agreement between the parties, strictly confidential, without prejudice, and inadmissible unless relevant to the resolution of any ambiguity that subsequently arises with respect to the interpretation of any provision of this Agreement. The parties intend that the confidentiality of these negotiations be determined in accordance with the Board's Guidelines, interpreted as if this Agreement were the result of a Board-ordered settlement conference.

The role adopted by Board Staff in Settlement Conferences is set out on page 5 of the Board's Guidelines. Although Board staff is not a party to this Agreement, as noted in the Guidelines, "Board Staff who participate in the settlement conference are bound by the same confidentiality standards that apply to parties to the proceeding". Board staff attended these discussions on that basis.

The parties have used their best efforts to ensure that the evidence supporting the Agreement is set out in the Agreement. The evidence supporting the agreement on each issue is cited in each section of the Agreement. Abbreviations will be used when identifying exhibit references. For example, Exhibit A, Tab 4, Schedule 1, Page 1 will be referred to as A/T4/S1/p. 1. The structure and presentation of the settled issues is consistent with settlement agreements which have been accepted by the Board in prior cases. The parties agree that this Agreement forms part of the record in the proceeding.

## **1. Are the proposed facilities needed?**

(Complete settlement)

The parties agree that Lobo C and Hamilton-Milton facilities are needed to meet forecasted demand.

The following parties agree with the settlement of this issue: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC and VECC

The following parties take no position: GAPLO and TCPL

Evidence References:

A/T5, A/T5/Attachment 1 (2014 ICF Report), A/T6, A/T7, A/T8, Exhibit B.Staff.1, Exhibit B.TCPL.1, Exhibit B.TCPL.2, Exhibit B.TCPL.3, Exhibit B. CME.2a), Exhibit B. SEC.2, Exhibit B.APPrO.1, Exhibit B.APPrO.1, Exhibit B.APPrO.3, Exhibit B.APPrO.5, Exhibit B.APPrO.6, Exhibit B.APPrO.7, Exhibit B.LPMA.2, Exhibit B.LPMA.7, Exhibit B.VECC.1a), Exhibit B.OGVG.FRPO.CME.4, Exhibit B.OGVG.FRPO.CME.5, Exhibit B.OGVG.FRPO.CME.9, Exhibit B.OGVG.12, Exhibit B.OGVG.16

## **2. Do the proposed facilities meet the Board's economic tests as outlined in the Filing Guidelines on the Economic Tests for Transmission Pipeline Applications, dated February 21, 2013, as applicable?**

(Complete settlement)

The parties agree that the proposed facilities meet the Board's economic tests as outlined in the Filing Guidelines on the Economic Tests for Transmission Pipeline Applications, dated February 21, 2013, as applicable.

As filed at A/T9/p.3, the result of the Stage 1 economics for the proposed facilities indicate a cumulative net present value ("NPV") of (\$258.5) million and a profitability index ("PI") of 0.38. The NPV was updated in Exhibit B.Staff.3 Attachment 1 to (\$259.2) million with no change to the PI. As per Issue 3 of this Agreement below, Union agreed to reduce the contingency amount for this project by \$25.0 million. The result is a revised project NPV of (\$238.5) million and a PI of 0.39. Schedules detailing the revised economics are provided at Appendix 1 of the Agreement.

The following parties agree with the settlement of this issue: BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC and VECC

The following parties take no position: APPrO, GAPLO and TCPL



#### Evidence References:

A/T9, A/T10, Exhibit B.Staff.3, Exhibit B.Staff.5, Exhibit B.VECC.3a), Exhibit B.APPrO.7g),h), Exhibit B.CME.3

### **3. What are the potential short-term and long-term rate impacts to customers? Are these costs and rate impacts to customers appropriate?**

(Complete settlement)

The parties agree that the costs and rate impacts are appropriate subject to the following with respect to the level of contingency costs and potential capacity turnback risk issues.

#### Level of Contingency Costs

For the purposes of settlement, Union agrees to reduce the total contingency cost for the Lobo C Compressor and the Hamilton Milton Pipeline from \$90.14 million to \$65.14 million (\$25.0 million) for ratemaking. Contingency costs are included to cover cost risks that are unforeseeable or difficult to predict at the time the capital cost estimate is prepared. Cost risks that may be unforeseen or are difficult to predict include foreign exchange risk, environmental mitigation and permitting.

The \$25.0 million reduction in the level of contingency will be prorated between the Lobo C Compressor and the Hamilton Milton Pipeline. The revised forecast capital expenditure for the LOBO C Compressor is \$159.68 million. The revised forecast capital expenditure for Hamilton Milton Pipeline is \$231.04 million. The revised forecast capital expenditures are provided at Appendix 2. Revised rate impacts are provided at Appendix 3.

Parties agree that in the event that the actual capital cost exceeds the revised forecast capital cost, any party may take any position as to the prudence of the actual capital cost in a subsequent proceeding. Union is proposing to track these costs in a deferral account as filed at A/T10/S7.

#### Capacity Turnback

CME, FRPO and OGVG submitted evidence relating to concerns regarding potential capacity turnback and the resulting rate impacts. To address these concerns, the intervenor evidence called for conditions of approval that would extend the terms of existing transportation contracts and set a floor on the ex-franchise demand factors used for allocating Dawn to Parkway costs for a period of ten years.

The parties do not agree on the risk of Dawn Parkway capacity turnback post-2018. For the purposes of settlement, while the parties agree that leave to construct should be granted, there is no agreement of how turnback risk should be dealt with in the context of the proposed facilities. Parties agree that this issue will be dealt with in Union's next cost of service

proceeding. For greater certainty, intervenors are in no way restricted or precluded from making any argument before the Board in that proceeding that it is appropriate that certain cost allocation measures should be put in place to insulate ratepayers from the effect of unutilized and underutilized capacity on the Dawn-Parkway system due to potential turnback risk. Accordingly, parties agree that no conditions related to capacity turnback are required at this time.

The following parties agree with the settlement of this issue: BOMA, CME, FRPO, LPMA, OGVG, SEC and VECC

The following parties take no position: APPrO, GAPLO, Kitchener and TCPL

Evidence References:

A/T9, A/T10, Exhibit B.Staff.1, Exhibit B.Staff.5, Exhibit B.LPMA.1, Exhibit B.LPMA.6, Exhibit B.VECC.2, Exhibit B.VECC.3b), Exhibit B.OGVG.FRPO.CME.11, Exhibit B.TCPL.1, Exhibit B.TCPL.2, Exhibit B.TCPL.3, Exhibit B.SEC.5, Exhibit B.SEC.6, Exhibit B.APPrO.2, Exhibit B.APPrO.5, Exhibit B.APPrO.6, written evidence and interrogatories of OGVG.FRPO.CME

**4. What are the facilities and non-facilities alternatives to the proposed facilities? Have these alternatives been adequately assessed and are any preferable to the proposed facilities, in whole or in part?**

(Complete settlement)

The parties agree the alternatives, both facility and non-facility, to the proposed facilities were adequately assessed. The parties also agree that based on the projected demands on the Dawn Parkway System, the facilities as proposed in this application are the preferred alternative.

The following parties agree with the settlement of this issue: BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC and VECC

The following parties take no position: APPrO, GAPLO and TCPL

Evidence References:

A/9, A/T10, Exhibit B.CME.2, Exhibit B.Staff.4, Exhibit B.LPMA.3, Exhibit B.LPMA.4, Exhibit B.SEC.4, Exhibit B.SEC.5, Exhibit B.SEC.6, Exhibit B.CME.1, Exhibit B.OGVG.FRPO.CME.1, Exhibit B.OGVG.FRPO.CME.2, Exhibit B.OGVG.FRPO.CME.3, Exhibit B.OGVG.FRPO.CME.6, Exhibit B.OGVG.FRPO.CME.7, Exhibit B.OGVG.FRPO.CME.8, Exhibit B.OGVG.FRPO.CME.9, Exhibit B.OGVG.FRPO.CME.10, Exhibit B.OGVG.14, Exhibit B.OGVG.15, Exhibit B.OGVG.17

**5. Do the facilities address the OEB Environmental Guidelines for Hydrocarbon Pipelines as applicable?**

(Complete Settlement)

Union agrees to undertake a post-construction comparative crop yield study. Union also agrees that it will offer to landowners, at a minimum, the Hamilton to Milton Letter of Understanding in the form attached hereto as Appendix 4. By doing so, GAPLO's request in its evidence at page 12, para 35 a) that Union be required to file a cumulative effects assessment in this proceeding is satisfied.

The following parties are in agreement: GAPLO

The following parties take no position: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC, VECC and TCPL

Evidence References:

A/T12, A/T12/Attachment 1 and 2, Exhibit B.GAPLO.6, Exhibit B.GAPLO.10, Exhibit B.GAPLO.14, Exhibit B.GAPLO.15, Exhibit B.GAPLO.21, Exhibit B.GAPLO.23, Exhibit B.GAPLO.24, Exhibit B.GAPLO.25, Exhibit B.GAPLO.26, Exhibit B.GAPLO.28, written evidence and interrogatories of GAPLO

**6. Are there any outstanding landowner matters for the proposed facilities with respect to routing and construction matters? For greater clarity, landowners include parties from whom permits, crossing agreements and other approvals are required.**

(Partial Settlement)

Union agrees to the appointment of an independent construction monitor for construction on agricultural lands for the Hamilton- Milton pipeline. The construction monitor will be chosen by a committee consisting of one representative from each of Union, the OEB and GAPLO. The scope of work for the construction monitor will be:

1. To observe impacts of construction on the land, including right-of-way preparation, trenching, backfill and clean-up operations as well as wet soil shutdown events;
2. To review construction activities for compliance with the OEB Conditions of Approval, Letters of Understanding ("LOU") agreed to between landowners and Union;
3. To review all specific construction commitments included in Union's construction contract;
4. To respond to specific requests by landowners and the committee within 24 hours while maintaining limited contact with landowners on a day-to-day basis; and
5. To prepare and deliver a series of activity reports in a timely manner to the appropriate persons.

Union further agrees to file interim and final reports of the construction monitor with the OEB and provide copies to GAPLO. Union's agreement is without prejudice to any position it may take in a future proceeding with respect to the appointment of an independent construction monitor.

There is no agreement on using the landowner LOU from EB-2005-0550 (Strathroy-Lobo) for Hamilton Milton Pipeline Project. This issue will proceed to hearing. The Hamilton-Milton LOU is provided at Appendix 4.

The following parties are in agreement: GAPLO

The following parties take no position: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC, VECC and TCPL

Evidence References:

A/T13, Exhibit B.Staff.6, Exhibit B.CN.1, Exhibit B.GAPLO.1, Exhibit B.GAPLO.2, Exhibit B.GAPLO.7, Exhibit B.GAPLO.8, Exhibit B.GAPLO.11, Exhibit B.GAPLO.12, Exhibit B.GAPLO.16, Exhibit B.GAPLO.17, Exhibit B.GAPLO.19, Exhibit B.GAPLO.20, Exhibit B.GAPLO.28, Exhibit B.GAPLO.30, written evidence and interrogatories of GAPLO

**7. Is the form of easement agreement offered by Union or that will be offered by Union to each owner of land affected by the approved route or location appropriate?**

(Partial settlement)

There is no agreement to use the Form of Easement approved by the Board in EB-2005-0550 (Strathroy Lobo Pipeline Project) for the Hamilton Milton Pipeline Project as requested in GAPLO's evidence at page 12, para 34 a) . The specific clause at issue relates to pipeline abandonment. This pipeline abandonment issue will proceed to hearing.

Parties agree to the following wording related to future use of lands adjacent to the easement:

*"The Pipeline (including attachments, equipment and appliances for Cathodic protection but excluding valves, take-offs and fencing installed under Clause 9 hereof) shall be laid to such a depth that upon completion of installation it will not obstruct the natural surface run-off from the Lands nor ordinary cultivation of the Lands nor any tile drainage system existing in the Lands at the time of installation of the Pipeline nor any planned tile drainage system to be land in the Lands in accordance with standard drainage practice, if the Transferee is given at least (30) thirty days notice of such planned system prior to the installation of the Pipeline. The Transferee agrees to make reasonable efforts to*

*accommodate the planning and installation of future tile drainage systems following installation of the Pipeline so as not to obstruct or interfere with such tile installation. In the event there is a change in the use of all, or a portion of, the Transferor Lands adjacent to the Lands which results in the Pipeline no longer being in compliance with the pipeline design class location requirements, then the Transferee shall be responsible for any costs associated with any changes to the Pipeline required to ensure compliance with the class location requirements.”*

The following are in agreement: GAPLO

The following parties take no position: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, SEC, OGVG, TCPL and VECC

Evidence References:

A/T13, Exhibit B.GAPLO.7, Exhibit B.GAPLO.16, Exhibit B.GAPLO.17, written evidence and interrogatories of GAPLO

**8. Are the proposed facilities designed in accordance with current technical and safety requirements?**

(Complete settlement)

Parties agree the proposed facilities are designed in accordance with current technical and safety requirements. In response to GAPLO’s request in evidence page 12 paragraph 35b) Union filed their Standard Operating Procedure for depth of cover on February 23, 2015. Union also agrees that it will offer to landowners, at a minimum, the Hamilton to Milton Letter of Understanding in the form attached hereto as Appendix 4.

The following parties agree with the settlement of this issue: GAPLO

The following parties take no position: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, SEC, OGVG, TCPL and VECC

Evidence References:

A/T11, Exhibit B.GAPLO.2, Exhibit B.GAPLO.3, Exhibit B.GAPLO.29, Exhibit B.GAPLO.30

**9. Has there been adequate consultation with other potentially affected parties?**

(Complete settlement)

Parties agree there has been adequate consultation with other potentially affected parties.

The following parties agree with the settlement of this issue: GAPLO

The following parties take no position: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC, TCPL and VECC

Evidence References:

A/T12, A/T13, A/T14, Exhibit B.Staff.7

**10. Does the project meet the capital pass-through mechanism criteria for pre-approval to recover the cost consequences of the proposed facilities?**

(Complete settlement)

The parties agree that the project meets the capital pass-through mechanism criteria for pre-approval to recover the cost consequences of the proposed facilities.

As part of the EB-2013-0202 Settlement Agreement (2014-2018 Incentive Rate Mechanism (“IRM”)), Parties agreed to establish a deferral account to capture differences between the forecast annual net revenue requirement and the actual net delivery revenue requirement for each year of the IRM. As part of this Agreement, parties agree that if Union’s facilities (Lobo C and Hamilton-Milton) are in-service prior to TransCanada Pipelines (“TCPL”) facilities downstream of Parkway (the Vaughn Loop), parties are free to take any position as to whether or not an adjustment to the deferral account balance as a result of this timing difference is warranted, including whether Union’s facilities should be considered in-service for ratemaking purposes. By agreeing to the above, parties agree that no condition of approval linking the construction or in-service timing of Union’s Dawn Parkway facilities to the construction or in-service timing of TCPL’s facilities is required.

The following parties agree with the settlement of this issue: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC and VECC

The following parties take no position: GAPLO and TCPL

Evidence References:

A/T9, A/T10, Exhibit B.Staff.1, Exhibit B.Staff.2, Exhibit B.APPrO.1, Exhibit B.CME.2, Exhibit B.LPMA.7, Exhibit B.SEC.1.

**11. If the Board approves the proposed facilities, what conditions, if any, are appropriate?**

(Partial Settlement)

With the exception of GAPLO (Issues 6 and 7) parties agree that no additional conditions to the standard conditions of approval are required subject to the settled issues in Issues 3, 5, 8 and 10 above, and Union's response in Exhibit B.Staff.8 where Union noted that condition 1.2 of the standard conditions of approval proposed by Board staff should read as "Unless otherwise ordered by the Board, authorization for Leave to Construct shall terminate December 31, 2017, unless construction has commenced prior to that date."

The following parties are not in agreement: GAPLO

The following parties agree with the settlement of this issue: APPrO, BOMA, CME, FRPO, LPMA, Kitchener, OGVG, SEC and VECC

The following parties take no position: TCPL

Evidence References:

Exhibit B.Staff.8, written evidence and interrogatories of OGVG.FRPO.CME, written evidence and interrogatories of GAPLO

**EB-2014-0261**  
**Settlement Agreement**  
**Appendix 1**  
**Page 1 of 3**

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**EB-2014-0261**  
**Settlement Agreement**  
**Appendix 1**  
**Page 2 of 3**

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**EB-2014-0261**  
**Settlement Agreement**  
**Appendix 1**  
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**TOTAL ESTIMATED PIPELINE COSTS - ADJUSTED FOR SETTLEMENT**

<b>IPS 48 Hamilton to Milton</b>	<b>As filed</b>	<b>Adjustment</b>	<b>Per Settlement</b>
Materials	\$18,897,000		\$18,897,000
Construction and Labour	\$160,425,000		\$160,425,000
Contingencies	\$62,763,000	-\$14,783,000	\$47,980,000
Interest During Construction	<u>\$3,735,000</u>		<u>\$3,735,000</u>
<b>Total Estimated Pipeline Capital Costs – 2016 Construction</b>	<b><u>\$245,820,000</u></b>		<b><u>\$231,037,000</u></b>

**TOTAL ESTIMATED STATION COSTS- ADJUSTED FOR SETTLEMENT**

<b>Lobo Compressor Plant</b>	<b>As filed</b>	<b>Adjustment</b>	<b>Per Settlement</b>
Materials	\$56,131,000		\$56,131,000
Construction and Labour	\$80,751,000		\$80,751,000
Contingencies	\$27,377,000	-\$10,217,000	\$17,160,000
Interest During Construction	<u>\$5,637,000</u>		<u>\$5,637,000</u>
<b>Total Estimated Station Capital Costs – 2016 Construction</b>	<b><u>\$169,896,000</u></b>		<b><u>\$159,679,000</u></b>

UNION GAS LIMITED  
Hamilton-Milton Pipeline and Lobo C Compressor Project Revenue Requirement - Per Settlement

Line No.	Particulars (\$000's)	2016 (a)	2017 (b)	2018 (c)
	<u>Rate Base Investment</u>			
1	Capital Expenditures	378,233	12,482	-
2	Average Investment	44,292	376,925	372,457
	<u>Revenue Requirement Calculation:</u>			
	<u>Operating Expenses:</u>			
3	Operating and Maintenance Expenses (1)	187	1,128	1,150
4	Depreciation Expense (2)	4,528	9,158	9,261
5	Property Taxes (3)	191	1,149	1,172
6	Total Operating Expenses	<u>4,906</u>	<u>11,435</u>	<u>11,583</u>
7	Required Return (6.031% x line 2) (4)	2,671	22,732	22,462
	<u>Income Taxes:</u>			
8	Income Taxes - Equity Return (5)	487	4,147	4,097
9	Income Taxes - Utility Timing Differences (6)	(7,381)	(9,192)	(7,892)
10	Total Income Taxes	<u>(6,894)</u>	<u>(5,046)</u>	<u>(3,795)</u>
11	Total Revenue Requirement (line 6 + line 7 + line 10)	<u>683</u>	<u>29,121</u>	<u>30,251</u>
12	Incremental Project Revenue (7)	<u>1,559</u>	<u>9,357</u>	<u>9,357</u>
13	Net Revenue Requirement (line 11 - line 12)	<u>(876)</u>	<u>19,764</u>	<u>20,894</u>

Notes:

- (1) Expenses include salaries and wages, employee-related expenses, fleet costs, materials and operating expenses.
- (2) Depreciation expense at 2013 Board-approved depreciation rates.
- (3) Property taxes in 2018 include \$0.792 million for the Hamilton-Milton pipeline and \$0.380 million for Lobo C compressor and facilities.
- (4) The required return of 6.031% assumes a capital structure of 64% long-term debt at 4.4% and 36% common equity at the 2013 Board-approved return of 8.93% ( $0.64 * 0.044 + 0.36 * 0.0893$ )  
The 2018 required return calculation is as follows:  
 $\$372.457 \text{ million} * 64\% * 4.4\% = \$10.488 \text{ million plus}$   
 $\$372.457 \text{ million} * 36\% * 8.93\% = \$11.974 \text{ million for a total of } \$22.462 \text{ million.}$
- (5) Taxes related to the equity component of the return at a tax rate of 25.5%.
- (6) Taxes related to utility timing differences are negative as the capital cost allowance deduction in arriving at taxable income exceeds the provision of book depreciation in the year.
- (7) Project revenue assumes an estimated M12 Dawn-Parkway rate of \$2.546 GJ/mth and an M12 Kirkwall-Parkway rate of \$0.450 GJ/mth.  
The 2018 revenue is calculated as follows:  
M12 Dawn-Parkway demands of 270,733 GJ x \$2.546 x 12 / 1000 = \$8.271 million plus  
M12 Kirkwall-Parkway demands of 36,301 GJ x \$0.450 x 12 / 1000 = \$0.196 million plus  
Union North T-Service demands of 29,115 GJ x \$2.546 x 12 / 1000 = \$0.890 million

UNION GAS LIMITED  
2018 Cost Allocation Impacts of Hamilton-Milton Pipeline and Lobo C Compressor Project - Per Settlement

Line No.	Particulars	Total Cost Allocation Impacts (\$000's)	Cost Allocation Change in Demands (1) (\$000's)	Dawn-Parkway Easterly Transmission (2)				Other Functional Classifications		
		(a) = (b + e + i)	(b)	Project Costs (3) (\$000's)	Indirect Costs (\$000's)	Total (\$000's)	(%)	Project Costs (3) (\$000's)	Indirect Costs (\$000's)	Total (\$000's)
		(a) = (b + e + i)	(b)	(c)	(d)	(e) = (c + d)	(f)	(g)	(h)	(i) = (g + h)
1	Rate M1	(2,168)	472	1,938	512	2,450	6%	(863)	(4,227)	(5,089)
2	Rate M2	304	158	651	172	823	2%	(113)	(565)	(678)
3	Rate M4	113	46	189	50	239	1%	(25)	(147)	(173)
4	Rate M5	(159)	0	2	0	2	0%	(25)	(137)	(162)
5	Rate M7	75	21	87	23	110	0%	(9)	(48)	(57)
6	Rate M9	38	8	31	8	39	0%	(2)	(8)	(9)
7	Rate M10	1	0	1	0	1	0%	(0)	(1)	(1)
8	Rate T1	17	23	94	25	118	0%	(17)	(107)	(124)
9	Rate T2	403	148	607	160	767	2%	(79)	(433)	(512)
10	Rate T3	275	53	220	58	278	1%	(8)	(49)	(57)
11	Subtotal - Union South	(1,104)	929	3,820	1,008	4,828	12%	(1,140)	(5,722)	(6,862)
12	Excess Utility Space	(74)	-	-	-	-	0%	(18)	(57)	(74)
13	Rate C1	(29)	-	-	-	-	0%	(6)	(23)	(29)
14	Rate M12	30,535	(2,488)	26,326	6,950	33,276	82%	(124)	(128)	(253)
15	Rate M13	(1)	-	-	-	-	0%	(0)	(1)	(1)
16	Rate M16	(3)	-	-	-	-	0%	(1)	(2)	(3)
17	Subtotal - Ex-franchise	30,427	(2,488)	26,326	6,950	33,276	82%	(150)	(211)	(360)
18	Rate 01	(57)	542	1,310	346	1,655	4%	(403)	(1,851)	(2,254)
19	Rate 10	265	142	343	91	433	1%	(57)	(254)	(311)
20	Rate 20 (4)	963	873	256	68	324	1%	(18)	(216)	(234)
21	Rate 100	(174)	3	6	2	8	0%	(32)	(153)	(185)
22	Rate 25	(68)	-	-	-	-	0%	(12)	(57)	(68)
23	Subtotal - Union North	928	1,559	1,915	506	2,421	6%	(521)	(2,531)	(3,052)
24	In-franchise (line 11 + line 23)	(177)	2,488	5,735	1,514	7,249	18%	(1,661)	(8,253)	(9,914)
25	Ex-franchise (line 17)	30,427	(2,488)	26,326	6,950	33,276	82%	(150)	(211)	(360)
26	Total	30,251	(0)	32,061	8,463	40,525	100%	(1,811)	(8,463)	(10,274)

Notes:

- (1) Allocation of the 2013 Board-approved costs updated to include the incremental Dawn-Parkway Project demands of 474,949 GJ/d.
- (2) The Project costs of \$32.061 million and the indirect costs of \$8.463 million are allocated in proportion to the Dawn to Parkway demand allocation provided at EB-2011-0210, Exhibit G3, Tab 5, Schedule 23, Updated, pages 7-8, line 5, updated to include the incremental demands of 474,949 GJ/d.
- (3) The total 2018 Project costs of \$30.251 million include \$32.061 million directly allocated to the Dawn-Parkway Easterly functional classification and (\$1.811) million of property and income taxes allocated to distribution, storage and other transmission-related functional classifications.
- (4) Of the total \$0.963 million in costs allocated to Rate 20, \$1.039 million is associated with a new Dawn-based storage service for North T-service customers.

UNION GAS LIMITED  
2018 General Service Bill Impacts - Per Settlement  
Includes Hamilton-Milton Pipeline and Lobo C Compressor Project  
Annual Consumption of 2,200 m<sup>3</sup>

Line No.	Rate M1 - Particulars	EB-2013-0365 Approved 01-Jan-14 Total Bill (1)	EB-2014-0261 Proposed 01-Jan-18 Total Bill	Bill Impact	
		(\$) (a)	(\$) (b)	(\$) (c) = (b - a)	(%) (d) = (c / a)
	<u>Delivery Charges</u>				
1	Monthly Charge	252.00	252.00	-	
2	Delivery Commodity Charge	80.82	78.25	(2.57)	
3	Storage Services	16.48	16.11	(0.37)	
4	Total Delivery Charge	349.30	346.36	(2.94)	-0.8%
	<u>Supply Charges</u>				
5	Transportation to Union	75.90	75.90	-	
6	Commodity & Fuel	394.23	394.23	-	
7	Total Gas Supply Charge	470.13	470.13	-	
8	Total Bill (line 4 + line 7)	819.43	816.49	(2.94)	-0.4%
9	Impacts for Customer Notices - Sales (line 8)			(2.94)	
10	Impacts for Customer Notices - Direct Purchase (line 4)			(2.94)	

Line No.	Rate 01 Eastern Zone - Particulars	EB-2013-0365 Approved 01-Jan-14 Total Bill (1)	EB-2014-0261 Proposed 01-Jan-18 Total Bill	Bill Impact	
		(\$) (a)	(\$) (b)	(\$) (c) = (b - a)	(%) (d) = (c / a)
	<u>Delivery Charges</u>				
11	Monthly Charge	252.00	252.00	-	
12	Delivery Commodity Charge	198.40	191.43	(6.97)	
13	Total Delivery Charge	450.40	443.43	(6.97)	-1.5%
	<u>Supply Charges</u>				
14	Transportation to Union	132.80	132.88	0.08	
15	Storage Services	75.57	80.93	5.37	
16	Subtotal	208.37	213.81	5.44	2.6%
17	Commodity & Fuel	394.44	394.44	-	
18	Total Gas Supply Charge (line 16 + line 17)	602.81	608.25	5.44	
19	Total Bill (line 13 + line 18)	1,053.21	1,051.69	(1.53)	-0.1%
20	Impacts for Customer Notices - Sales (line 19)			(1.53)	
21	Impacts for Customer Notices - Direct Purchase (line 13 + line 16)			(1.53)	

Note:

(1) Calculated as per Appendix A, EB-2013-0365.

UNION GAS LIMITED  
2018 Rate M12/M12-X/C1 Transportation Demand Charges Impacts of the  
Hamilton-Milton Pipeline and Lobo C Compressor Project- Per Settlement

Line No.	Services	EB-2013-0365 Approved (\$/GJ/day) (1)	EB-2014-0261 Proposed (\$/GJ/day)	Difference (c) = (b - a)	% Change (d) = (c / a)	EB-2014-0261 Including Parkway Projects (\$/GJ/day) (2)	Difference (f) = (e- a)	% Change (g) = (f / a)
		(a)	(b)			(e)	(f) = (e- a)	(g) = (f / a)
1	M12/C1 Dawn to Kirkwall	0.067	0.071	0.004	5.6%	0.085	0.018	26.3%
2	M12/C1 Dawn to Parkway	0.080	0.084	0.005	6.1%	0.101	0.022	27.3%
3	M12/C1 Kirkwall to Parkway	0.012	0.014	0.001	8.8%	0.016	0.004	32.8%
4	C1 Parkway to Kirkwall	0.019	0.021	0.002	8.8%	0.026	0.006	32.8%
5	C1 Parkway to Dawn	0.019	0.021	0.002	8.7%	0.026	0.006	32.8%
6	M12-X	0.099	0.106	0.007	6.7%	0.127	0.028	28.4%

Notes:

(1) EB-2013-0365, Appendix A, Pages 14-16, column (c), effective January 1, 2014.

(2) Parkway Projects includes Parkway West, Brantford to Kirkwall Pipeline and Parkway D Compressor Project.



UNION GAS LIMITED  
2018 General Service Bill Impacts - Per Settlement  
Includes Hamilton-Milton Pipeline and Lobo C Compressor Project and Estimated Gas Cost Savings  
Annual Consumption of 2,200 m<sup>3</sup>

Line No.	Rate M1 - Particulars	EB-2013-0365	EB-2014-0261	Bill Impact	
		Approved 01-Jan-14 Total Bill (1)	Proposed 01-Jan-18 Total Bill	(\$)	(%)
		(a)	(b)	(c) = (b - a)	(d) = (c / a)
	<u>Delivery Charges</u>				
1	Monthly Charge	252.00	252.00	-	
2	Delivery Commodity Charge	80.82	78.25	(2.57)	
3	Storage Services	16.48	16.11	(0.37)	
4	Total Delivery Charge	349.30	346.36	(2.94)	-0.8%
	<u>Supply Charges</u>				
5	Transportation to Union	75.90	51.85	(24.05)	
6	Commodity & Fuel	394.23	402.89	8.66	
7	Total Gas Supply Charge	470.13	454.74	(15.39)	
8	Total Bill (line 4 + line 7)	819.43	801.10	(18.33)	-2.2%
9	Impacts for Customer Notices - Sales (line 8)			(18.33)	
10	Impacts for Customer Notices - Direct Purchase (line 4)			(2.94)	

Line No.	Rate 01 Eastern Zone - Particulars	EB-2013-0365	EB-2013-0365	EB-2014-0261	Bill Impact	
		Approved 01-Jan-14 Total Bill (1)	Updated (2) 01-Jan-14 Total Bill	Proposed 01-Jan-18 Total Bill	(\$)	(%)
		(a)	(b)	(c)	(d) = (c - b)	(e) = (d / b)
	<u>Delivery Charges</u>					
11	Monthly Charge	252.00	252.00	252.00	-	
12	Delivery Commodity Charge	198.40	198.40	191.43	(6.97)	
13	Total Delivery Charge	450.40	450.40	443.43	(6.97)	-1.5%
	<u>Supply Charges</u>					
14	Transportation to Union	132.80	219.48	132.62	(86.85)	
15	Storage Services	75.57	93.40	126.82	33.42	
16	Subtotal	208.37	312.88	259.44	(53.44)	-17.1%
17	Commodity & Fuel	394.44	389.99	403.15	13.16	
18	Total Gas Supply Charge (line 16 + line 17)	602.81	702.86	662.59	(40.28)	
19	Total Bill (line 13 + line 18)	1,053.21	1,153.27	1,106.02	(47.24)	-4.1%
20	Impacts for Customer Notices - Sales (line 19)				(47.24)	
21	Impacts for Customer Notices - Direct Purchase (line 13 + line 16)				(60.40)	

Note:

- (1) Calculated as per Appendix A, EB-2013-0365.
- (2) Update includes TCPL settlement tolls and Empress to NDA long haul transporation contract of 67,000 GJ/d.

UNION GAS LIMITED  
Hamilton-Milton Pipeline and Lobo C Compressor Project Revenue Requirement by Rate Class - Per Settlement

Line No.	Particulars (\$000's)	2016 (a)	Variance (b) = (c - a)	2017 (c)	Variance (d) = (e - c)	2018 (e)
1	Rate M1	(2,162)	(475)	(2,637)	469	(2,168)
2	Rate M2	(135)	369	234	70	304
3	Rate M4	(21)	116	96	17	113
4	Rate M5	(99)	(76)	(175)	15	(159)
5	Rate M7	4	65	69	6	75
6	Rate M9	8	28	37	1	38
7	Rate M10	0	1	1	0	1
8	Rate T1	(34)	39	5	12	17
9	Rate T2	(49)	401	352	51	403
10	Rate T3	65	203	268	6	275
11	Subtotal - Union South	<u>(2,423)</u>	<u>672</u>	<u>(1,750)</u>	<u>646</u>	<u>(1,104)</u>
12	Excess Utility Space	(46)	(35)	(81)	7	(74)
13	Rate C1	(14)	(17)	(31)	2	(29)
14	Rate M12	3,078	27,282	30,360	175	30,535
15	Rate M13	(1)	(0)	(1)	0	(1)
16	Rate M16	(2)	(1)	(3)	0	(3)
17	Subtotal - Ex-franchise	<u>3,014</u>	<u>27,229</u>	<u>30,243</u>	<u>184</u>	<u>30,427</u>
18	Rate 01	(549)	276	(273)	216	(57)
19	Rate 10	15	216	231	33	265
20	Rate 20	780	158	938	25	963
21	Rate 100	(113)	(80)	(193)	18	(174)
22	Rate 25	(42)	(33)	(75)	7	(68)
23	Subtotal - Union North	<u>92</u>	<u>537</u>	<u>628</u>	<u>299</u>	<u>928</u>
24	In-franchise	(2,331)	1,209	(1,122)	946	(177)
25	Ex-franchise	3,014	27,229	30,243	184	30,427
26	Total	<u>683</u>	<u>28,438</u>	<u>29,121</u>	<u>1,130</u>	<u>30,251</u>

## LETTER OF UNDERSTANDING

Between:

hereinafter referred to as the “**Landowner**”

and

**Union Gas Limited**

hereinafter referred to as the “**Company**”

### **INTRODUCTION**

The Company has applied to the Ontario Energy Board to construct a 48 inch diameter pipeline which will run approximately 20 kilometres starting at the existing Union Gas Hamilton Valve Site, approximately 400 metres east of Highway 6, and travelling parallel to an existing 48 inch Union Gas natural gas pipeline easement, and terminating at the existing Union Gas Milton Valve Site located 150 metres west of Philbrook Drive, south of Derry Road (the “Project”). As a result it will be necessary for the Company to enter onto the Landowner’s property for the purpose of constructing and installing the pipeline.

The Company recognizes that the construction of the pipeline may result in damage to the Landowner’s property and a disruption to the Landowner’s daily activities for which the Company is obligated to compensate the Landowner and observe various construction techniques to minimize such damages.

It is the policy of the Company that Landowners affected by its pipeline projects be dealt with on a consistent basis that is fair to both parties. This Letter of Understanding represents the results of negotiations between the Company and the Landowner and outlines the obligations of each party with respect to:

- i) The construction of the pipeline;
- ii) Remediation of the Landowner’s property; and,
- iii) Compensation to the Landowner for various damages as a result of the construction of the pipeline.

The parties acknowledge that the Company is required to adhere to all of the conditions set out in the Leave to Construct Order of the Ontario Energy Board and that the foregoing are additional undertakings that the Company has agreed upon with the Landowner on the Project. A copy of the Conditions of Approval will be mailed to the Landowner upon request.

### **1. Pre-Construction Meeting**

Prior to construction, the Company’s representatives shall visit with the Landowner to conduct a preconstruction interview. During this interview the parties will review the timing of construction and discuss site specific issues and implementation of mitigation and rehabilitation measures in accordance with the provisions of this Letter of Understanding. For greater certainty, and to help ensure Landowner requests are implemented, the Company will document the results of such meetings and provide a copy to the Landowner.

**2. Testing For Soybean Cvst Nematode**

In consultation with the Landowner, the Company agrees to sample all agricultural easements along the pipeline route of this Project, before construction, and any soils imported to the easement lands for the presence of soybean cyst nematode (SCN) and provide a report of test results to the Landowner. In the event the report indicates the presence of SCN, the Company will work with OMAFRA to develop the most current best practice at the time of construction. The Company will also test for SCN whenever it is conducting post-construction soil tests.

**3. Continued Supply of Services**

Where private water or utility lines are planned to be interrupted, the Company will supply temporary service to the affected Landowners prior to service interruption. In the case of unplanned interruption, temporary services will be provided by the Company at the earliest possible opportunity.

**4. Water Wells**

To ensure that the quality and quantity (i.e. static water levels) of well water and/or the well itself is maintained, a monitoring program will be implemented for all dug or drilled wells within 100 metres of the proposed pipeline and for any other wells recommended by the Company's hydrogeology Consultant. All samples will be taken by the Company's environmental personnel and analyzed by an independent laboratory. Results of testing will be summarized in a letter and will be provided to the Landowner.

Should well water (quantity and/or quality) or the well itself, be damaged from pipeline installation/operations, a potable water supply will be provided and the water well shall be restored or replaced as may be required.

**5. Staking of Work Space**

The Company agrees to stake the outside boundary of the workspace necessary for the construction of this Project which may include an easement and temporary land use area. The stakes will be located at 30 metre (98.4 foot) intervals prior to construction. The intervals or distance between stakes may decrease as deemed necessary in order to maintain sight-lines and easement boundaries in areas of sight obstructions, rolling terrain or stream and road crossings.

**6. Topsoil Stripping**

Prior to installing the pipeline in agricultural areas, the Company will strip topsoil from over the pipeline trench and adjacent subsoil storage area. All topsoil stripped will be piled adjacent to the easement and temporary land use areas in an area approximately 10 metres (33') in width. The topsoil and subsoil will be piled separately and the Company will exercise due diligence to ensure that topsoil and subsoil are not mixed. If requested by the Landowner, topsoil will be ploughed before being stripped to a depth as specified by the Landowner.

The Company will strip topsoil across the entire width of the easement (at the request of the Landowner), provided also that a temporary right to use any necessary land for topsoil storage outside the easement is granted by the Landowner.

If requested by the Landowner the Company will not strip topsoil. The topsoil/subsoil mix will be placed on the easement on top of the existing topsoil.

At the recommendation of the Company's Soils Consultant, topsoil will be over-wintered and replaced the following year. In these circumstances the Company will replace the topsoil such that the easement lands are returned to surrounding grade.

## **7. Depth of Cover**

The Company will install the pipeline with a minimum of 1.2 metres of cover, except where bedrock is encountered at a depth less than 1.2 metres, in which case the pipe will be installed with the same cover as the bedrock, but not less than 1.0 metre below grade.

If the Company, acting reasonably, determines in consultation with the Landowner that it is necessary to increase the depth of the Pipeline to accommodate current processes such as deep tillage, heavy farm equipment or land use changes, the Company will provide for additional depth of cover.

## **8. Levelling of Pipe Trench**

During trench backfilling the Company will remove any excess material after provision is made for normal trench subsidence. The Landowner shall have the right of first refusal on any such excess material. The Company's representative will consult with the Landowner prior to the removal of any excess material.

If topsoil is replaced in the year of construction and trench subsidence occurs the year following construction, the following guidelines will be observed:

- i) 0 to 4 inches - no additional work or compensation.
- ii) Greater than 4 inches - the Company will either:
  - (a) Strip topsoil, fill the depression with subsoil and replace topsoil, or
  - (b) Repair the settlement by filling it with additional topsoil.

If topsoil is replaced during the year of construction and mounding over the trench persists the year following construction, the following guidelines will be observed by the Company:

- i) 0 to 4 inches - no additional work or compensation;
- ii) Greater than 4 inches the Company will strip topsoil, remove the excess subsoil and replace the stripped topsoil;
- iii) Should adequate topsoil depth be available, the mound can be levelled with the approval of the Landowner.

If the topsoil is over wintered and subsidence occurs in the year following top soil replacement the following guidelines will be observed:

- i) 0 to 4 inches - no additional work or compensation.
- ii) Greater than 4 inches - the Company will repair the settlement by filling it with additional topsoil.

If the construction of the pipeline causes a restriction of the natural surface flow of water, due to too much or not enough subsidence, irrespective of the 4 inches level stated above, the Company will remove the restriction by one of the methods described above.

**9. Topsoil Replacement, Compaction Removal and Stone Picking**

The subsoil will be worked with a subsoiling implement, as agreed by the Company and Landowner.

Unless there is an agreement to the contrary, the Company will remediate any residual compaction in the subsoil prior to return of topsoil.

The Company will pick stones prior to topsoil replacement.

Stone picking will be completed, by hand or by mechanical stone picker to a size and quantity consistent with the adjacent field, but not less than stones 100 mm (4 inches) in diameter.

After topsoil replacement, the topsoil will be tilled with an implement(s) as agreed by the Company and Landowners.

After cultivation, the Company will pick stones again.

The Company will perform compaction testing on and off the easement before and after topsoil replacement and provide the results to the Landowner, upon request.

If agreed to by the parties, the Company will return in the year following construction and will cultivate the easement area. When necessary, to accommodate planting schedules, the Landowner should perform cultivation themselves, at the Company's expense (see Schedule of Rates attached as Schedule 3).

The Company shall, at a time satisfactory to the Landowner, return to pick stones 100 mm (4 inches) or larger in the following two years after construction, where there is a demonstrable need.

**10. Drainage Tiling**

The Company will repair and restore all field drainage systems and municipal drains impacted by construction to their original performance. The Company will be responsible for the remedy, in consultation with the Landowner, of any drainage problem created by the existence of the pipeline present and future. The Company will be responsible for any defects in the integrity and performance of tile installed or repaired in conjunction with construction, operation or repair, provided the defects are caused by the Company's activities, faulty materials or workmanship. The Company guarantees and will be responsible forever for the integrity and performance of such tile as well as any other drain tile or municipal drain compromised by the Company's activities, including future maintenance operations and problems caused by the Company's contractors, agents or assigns. Where the Landowner, acting reasonably, believes that there may be a drainage problem arising from the Company's operations, the Company will perform an integrity check on any tile construction/repair crossing the pipeline, and repair any deficiencies to the Landowner's satisfaction.

The Company will retain the services of a qualified independent drainage Consultant. The Consultant will work with each Landowner prior too, during and after construction. The Consultant will be responsible to gather as much background information from each Landowner prior to construction as available, and with this information in conjunction with the Landowner they will determine whether there is pre-construction, post construction and/or

temporary tile construction required on their land. The Consultant will provide where requested each Landowner with a tile plan for their review and approval prior to any installation of tile. The installation of tile will only be performed by a licensed drainage contractor to ensure that all drainage best practices are used. The Company will consult with the Landowner and mutually develop a list of five licensed tile drainage contractors from the area to bid on the work. All installations may be inspected by the Landowner or his/her designate prior to backfilling where practicable. The Company will provide the Landowner or his/her designate advance notice of the tile repair schedule. The Consultant will incorporate any professionally designed drainage plans obtained by the Landowner for future installation. If the Landowner intends to install or modify a drainage system but has not yet obtained professionally designed plans, the Consultant will work with the Landowner accordingly.

Once the Consultant has reviewed all the drainage background provided to them they will proceed in developing pre-construction tiling plans where required. The purpose of pre-construction work is to ensure that the pipeline work does not interfere or cut off any adjacent subsurface drainage. In conjunction with the Landowner the Consultant will design an appropriately sized header tile (interceptor drain) which will be installed 1m outside the easement limits by trench method in order to minimize the number of tiles crossing the pipeline easement. All intercepted tiles will be connected or end plugged accordingly. By installing the main outside the easement limits the Company can guarantee the integrity of the existing drainage system during the construction period. The Consultant/Landowner will be responsible for identifying to the pipeline contractor as reasonably possible any existing tiles 150mm or greater crossing the easement. The Company will ensure that any such crossings will be temporarily repaired across the trench line and maintained during the complete construction period until post construction work can repair them permanently. The Company where possible will expose any such tile crossings prior to pipeline trenching operations to obtain an exact invert depth and ensure that the pipeline is not going to conflict with them.

During construction the Consultant will be following the trenching operations collecting / monitoring and ensuring that the drainage is maintained accordingly. Once the Consultant has collected and reviewed all the survey information they will develop a post-construction tile plan and profile for each affected owner. These post construction tile plans will show the Landowner exactly how many tiles are to be installed on easement and by what method the contractor is to use plow/trench.

During construction, the Consultant will be following the trenching operations to ensure that the drainage is maintained.

The Consultant will also provide the Landowner with the most recent specifications concerning tile support systems for repairing and installing new tile across the pipeline trench. Once the Consultant has reviewed the drawing with the Landowner for their approval and received signature on the plan, the Consultant will provide the Landowner with a copy along with a specification for installation so they can monitor the work to be completed.

Also the Company will review other areas of drainage recommended by the drainage Consultant/Landowner such as:

- i) In areas where water may accumulate on or off easement as a result of the construction, the drainage Consultant, in conjunction with the Landowner, will develop a temporary tile plan to mitigate these impacts where the water cannot be pumped into an open drain or ditch. The Company could then pump into the temporary tile, but not into any existing tiles unless otherwise discussed and agreed upon by the Landowner.
- ii) In areas where the pipeline construction program clears lands adjacent to existing pipelines and adjacent drained land and as a result creates a newly cleared area large enough to farm, the Company will, at the request of the Landowner, develop a tile plan to drain the cleared area. The Company will install the tile in the newly cleared area, and install a drainage outlet that will enable the implementation of the tile plan, provided the cost of such work does not exceed the net present value of the crop revenue from the cleared area. The net present value shall be calculated using the same crop value and discount rate used in the one time crop loss compensation calculation. The net crop revenue shall be derived by reducing the crop value by a negotiated input cost. The Company will accept drainage design solutions that include the use of a motorized pump, if the Landowner releases the Company from all future operation and maintenance responsibilities for the pump. The Company will accept drainage design solutions that include outlet drains crossing adjacent properties, if the Landowner obtains necessary easements or releases fully authorizing such crossings.

The Company will do its best weather permitting to complete the post construction tiling work in the year of pipeline construction after the topsoil has been pulled, unless otherwise agreed upon with the Landowner. If it is not possible for the Company to complete the post construction tiling in the year of construction, the Company will undertake all measures possible to mitigate any off easement damages to the best of its ability.

In situations where topsoil is to be over wintered, the tiling plan will address the timing of tile installation.

Once the tiling is complete the Consultant will adjust all tile plans to reflect the as-constructed information and a copy will be provided to the Landowner for their records.

#### **11. Water Accumulation during Construction**

The Company will, unless otherwise agreed to with the Landowner, ensure any water which may accumulate on the easement during construction will be released into an open drain or ditch, but not in a tile drain. This may, however, be accomplished through the installation of temporary tile. The Company will provide the Landowner with a proposed temporary tiling plan for review and approval. If the Company pumps into an existing tile with the Landowner's permission, the water will be filtered.

#### **12. Access Across the Trench**

Where requested by the Landowner, the Company will leave plugs for access across the trench to the remainder of the Landowner's property during construction. Following installation of the pipe and backfill, if soft ground conditions persist that prevent the Landowner from crossing the trench line with farm equipment, the Company will improve crossing conditions either by further replacement and/or compaction of subsoil at the previous plug locations.



Should conditions still prevent Landowner crossing, the Company will create a gravel base on filter fabric across the trench line at the previous plug locations and remove same at the further request of the Landowner.

### **13. Restoration of Woodlots**

If requested by the Landowner prior to the start of construction, all stumps and brush will be removed from the easement. If the Landowner does not convert the land to agricultural use, Union will maintain a minimum 6 metre strip over the pipeline which will be kept clear by cutting the brush or spraying. The remainder of the easement will be allowed to reforest naturally or can be reforested by the Landowner.

### **14. Tree Replacement**

The Company has established a policy to replant twice the area of trees that are cleared for the Project. Landowners whose woodlots are to be cleared may apply in writing to the Company should they wish to participate in this program. Tree seedlings will be replanted on the right-of-way or within the Landowner's property using species determined in consultation with the Landowner. Although replanting on easement is not encouraged by the Company, when planting on easement occurs, it must be done in accordance with the easement and the Company's policies.

For windbreaks/hedgerows the Company will implement the following practice:

- i) If a deciduous (hardwood) tree in excess of six (6) feet is removed, a six (6) foot replacement tree will be planted; if a tree less than six (6) feet in height is removed, a similar sized tree will be planted.
- ii) If a coniferous (evergreen) tree in excess of four (4) feet is removed, a four (4) foot replacement tree will be planted; if a tree less than four (4) feet in height is removed, a similar sized tree will be planted.

The Company will warrant such trees for a period of one year following planting, provided the Landowner waters the trees as appropriate after planting.

### **15. Covenants**

Company covenants as follows:

- i) On present and proposed agricultural lands, the Company will undertake appropriate survey techniques to establish pre-construction and post-construction grades with the view to restoring soils to pre-construction grade as reasonably practicable.
- ii) All construction practices and appropriate environmental mitigation measures will be followed to ensure a proper clean up.
- iii) Whenever possible, all vehicles and equipment will travel on the trench line.
- iv) All subsoil from road bores will be removed.
- v) To replace or repair any fences which are damaged by pipeline construction in a good and workmanlike manner.
- vi) Any survey monuments which are removed or damaged during pipeline construction will be reset.

- vii) Its employees, agents, contractors and sub-contractors, will not use any off-easement culverts incorporated into municipal drains to provide access to the easement.
- viii) It will not use any laneway or culvert of the Landowner without the Landowner's prior written consent. In the event of such use, the Company will, at its own expense, repair any damage and compensate the Landowner accordingly.
- ix) To monitor and maintain private driveways that cross the easement for a period of 18 months after construction.
- x) That construction activities will not occur outside of agreed to areas without the written permission of the Landowner. In the event that such activities occur, the Company will pay for damages.
- xi) To implement its Landowner Complaint Tracking system which will be available to Landowners for the proposed construction.
- xii) To provide a copy of this Letter of Understanding and all environmental reports to the construction contractor.
- xiii) To ensure suitable passage and land access for agricultural equipment during construction.
- xiv) If there is greater than 50% crop loss after five years, at the request of the Landowner, the Company will retain an independent soils Consultant satisfactory to both parties to develop a prescription to rectify the problem.
- xv) To permit the planting of the 6 metre strip with permission for the re-establishment of windbreaks and that trees may be planted as a crop (nursery stock), provided that no tree is permitted to grow higher than 2 metres in height, and the species are of a shallow rooting variety. The use of hydraulic spades within the 6 metre strip is prohibited.
- xvi) In consultation with the Landowner, the Company agrees to retain an independent Consultant to carry out tests along the pipeline to monitor soils and crop productivity. As part of this testing, a soil specialist will conduct comparative compaction testing of the subsoil and NPK (nitrogen, phosphorus, potassium) testing and testing of PH levels on and off easement after construction. Global Positioning System (GPS) equipment may be used to identify all test locations. The Company further agrees to implement all commercially reasonable measures, where recommended by the soil specialist to remediate the soil.
- xvii) To work with the Landowner to ensure that weeds are controlled along the pipeline. Weeds will be sprayed or cut after discussion with the Landowner. The Landowner will be provided with a contact name in the event that concerns are experienced with weeds.
- xviii) To implement the Company's Integrity Dig Agreement for all integrity and maintenance operations on the pipeline.
- xix) At the request of the Landowner, the Company shall undertake a depth of cover survey of the pipeline and shall provide its findings to the Landowner. In agricultural areas, where it is determined that cover over the pipeline is less than 0.9 metres the Company shall restore depth of cover to a minimum of 0.9 metres with the importation of topsoil or by lowering the pipe. In areas where the top of the pipe is at

or below bedrock, the Company will ensure a minimum of 0.6 metres of cover over the pipeline.

- xx) Any imported topsoil shall be natural, free of SCN and shall have attributes consistent with the topsoil of adjacent lands as determined by the Company's Consultant.
- xxi) To implement Union's wet soil shut down practice as described in Schedule 4.

Landowner covenants as follows:

- i) To execute a Clean-up Acknowledgment when he/she is satisfied with the clean-up operations described in this Letter of Understanding. It is suggested that any tenant(s) who are affected by construction accompany the Landowner to inspect the clean-up prior to execution of the Clean-up Acknowledgment.
- ii) To be responsible to ensure his/her tenant is aware of the terms of the easement or temporary land use agreement and this Letter of Understanding.
- iii) To be responsible for making any compensation to his/her tenant for any matters included in the damage payment from the Company, as damages payments are made directly to the registered Landowner.

#### **16. Dispute Resolution**

In the event the parties are unable to reach resolution with respect to the following matters, the Company shall pay the costs of independent Consultants satisfactory to both the Landowner and the Company to resolve site specific disputes involving affected lands on a binding basis concerning the following:

- i) The need for topsoil importation as in Article 8 hereof, respecting the existence of identifiable subsidence,
- ii) The establishment of levels of compensation for specialty crops as in Article 21.
- iii) The resolution of future crop loss claims for Additional Productivity Loss under Article 21 hereof.

Where Construction Damages and Disturbance Damage settlements cannot be negotiated, the Company or the Landowner may apply to Ontario Municipal Board to settle unresolved claims. It is further understood and agreed that the Landowner's executing the easement, is without prejudice to his/her position in negotiation of damages following construction of the pipeline.

#### **17. Land Rights - Easements**

Land rights required for the Project include permanent interests such as pipeline easements (i.e. a limited interest in the affected lands) and may also include temporary land use agreements. The Company agrees that it will not surrender or be released from any of its obligations under an easement for this Project without the consent of the Landowner.

Consideration for these rights will be paid at the rate of 100% of the appraised market value of the affected lands. If agreement on the consideration for land rights cannot be reached, the Company will pay for a second report by a qualified appraiser who is chosen by the Landowner provided the appraiser and the terms of reference for the appraisal report are mutually acceptable to the Landowner and the Company. If consideration for land rights still cannot be agreed upon, the matter would be determined at a Ontario Municipal Board Compensation

Hearing and the Company's offers would not prejudice either party's presentation at the Hearing.

#### **18. Land Rights – Temporary Land Use Agreements and Top Soil Storage**

These rights will be required for at least a two year period, being the year of construction and the following year to allow for clean-up and restoration activities. Consideration for these rights will be paid at the rate of 50% of the appraised market value of the affected land. Should activities extend beyond the two year period, payment will be negotiated on an annual basis. Although every effort will be made by the Company to identify these rights in certain instances either before or during construction, additional temporary land use may be identified and compensation will be as outlined above.

#### **19. Damage Payments**

Compensation for damages can be grouped under two headings namely: Disturbance Damages, which are paid at the time easements and temporary land use agreements are executed, and Construction Damages, which are paid either before or after construction is completed. Top soil storage damages will be paid after construction is completed. Disturbance and Construction damage payments will apply to easement, temporary land use and top soil storage and will be based upon the areas of the proposed pipeline easement and temporary land use as set out in Schedule 1.

#### **20. Disturbance Damages**

Disturbance Damages are intended to recognize that pipeline construction will result in some unavoidable interference with active agricultural operations and certain other uses of affected lands. This may include lost time due to negotiations and construction, inconvenience to the farming operations, restricted headlands, interrupted access and extra applications of fertilizer. Other land uses may qualify for Disturbance Damages which are site-specific in nature and recognize the particular circumstances of the use being interfered with. Union will negotiate with the affected Landowner to address these site-specific issues.

#### **21. Construction Damages – Crop Loss**

The Company will offer the Landowner a one-time settlement for crop loss damages incurred on the easement and temporary land use areas resulting from the Project, which settlement will include the following:

- i) year of construction and future crop loss;
- ii) stone picking beyond the second year following construction;
- iii) crop losses associated with establishment of a cover crop.

Notwithstanding that the Landowner will have executed a Full and Final Release for crop damages either before or after construction, should productivity loss exceed the percentages paid through the "One Time" Program as in any year following construction and the Landowner has not been (or is not being) compensated for crop loss under the terms of an existing crop loss compensation program with the Company, the Company will reimburse the Landowner for the difference calculated by applying the percentage loss to the Landowner's actual gross return in the year and deducting the compensation received for that year under the "One Time" program ("Additional Productivity Loss"). It will be incumbent upon any Landowner making this type of claim to advise the Company in sufficient time to allow for investigation of the matter and completion of the required samplings.

Alternatively, at the option of the Landowner, upon provision of advance notice to the Company to permit opportunity for inspection, GPS data may be utilized to establish yield reductions for the purpose of any applicable Additional Productivity Loss provided that the Company is not responsible for installing GPS units or survey equipment if necessary ("GPS" option). In the event that the Landowner selects the GPS option, the Landowner must provide all necessary GPS documentation related to the entire farm field in question, including, but not limited to, maps, computer print-outs and formula to determine field averages. For greater clarity the following is an example of the calculation of Additional Productivity Loss:

- i) Third year crop loss under "One Time" Program = 50%.
- ii) Actual crop loss following investigation and sampling = 60%.
- iii) Difference payable to Landowner = 10%.

***Crop Loss for topsoil storage Areas***

Compensation for crop loss on topsoil storage areas will be as follows:

- In year of construction - 100% crop loss;
- In years after construction - measured crop loss;
- Payments will be based upon actual area used for topsoil storage;
- Compensation will not be prepaid;
- Compensation will be paid on an as incurred basis.

***Specialty Crops***

The one time payment does not apply to specialty crops. Specialty crops include tobacco, produce and registered seeds. Compensation will be negotiated on a site specific basis.

***Post construction cover crop program***

In addition to the one time payment, the Landowner may request a cover crop rehabilitation program for cultivated lands. Under this program the Landowner will plant alfalfa/sweet clover or other restoration crops approved by the Company on the easement and his/her normal crop in the remainder of the field for up to three years. The initial cost of tillage and planting will be paid by the Company as determined by "Economics Information", published by the Ministry of Agriculture and Food. The cost of seed planted over the easement will be compensated upon presentation of an invoice for same. This cover crop program does not apply for tobacco or other specialty crops.

**22. Woodlots and Windbreak/Hedgerow Trees**

With respect to compensation for damage to woodlots, the Landowner will have the following two options:

**Option 1:**

Woodlots and hedgerow trees will be cut and appraised by a qualified forester retained by the Company. Evaluation of trees in woodlots will be based on the practice as outlined on Schedule 3.

**Option 2:**

The Landowner may accept the One Time Crop Loss and Disturbance Damage Payment in lieu of the woodlot evaluation.

With respect to compensation for damage to other wooded areas:

Tree plantations (Christmas trees and nursery stock) will be appraised separately. Compensation for trees evaluated in this manner shall be set out in Schedule 4 to this document.

Evaluation of aesthetic trees will be based on the practice outlined in Schedule 4.

The forester will contact the Landowner before entry on their property. Copies of appraisal reports will be made available to affected Landowners and payment will be made in accordance with the reports.

The Company reserves the right to use trees for which it has paid compensation. At the Landowner's request, any remaining logs will be cut into 10 foot ( 3.05 metre ) lengths, lifted and piled adjacent to the easement.

**23. Gored Land**

The Company agrees to pay the Landowner 100 % crop loss on the gored land. Gored land is defined as land rendered inaccessible or unusable for agricultural purposes during the Project.

**24. Insurance**

Upon request of the Landowner, the Company will provide insurance certificates evidencing at least five million dollars in liability insurance coverage.

**25. Abandonment**

Upon the abandonment of the pipeline in accordance with the terms and conditions of the easement, the affected lands shall be returned as close as possible to its prior use and condition with no ascertainable changes in appearance or productivity as determined by a comparison of the crop yields with adjacent land where no pipeline has been installed. Without prejudice to any continuing right of the Landowner to Additional Productivity Loss, there shall be no additional compensation for crop loss to the Landowner

**26. Liability**

The Company will be responsible for damages to property, and equipment, resulting from construction operations, and will pay for repairs or replacement costs. The Company will be responsible, and indemnify the Landowner from any and all liabilities, damages, costs, claims, suits and actions except those resulting from the gross negligence or wilful misconduct of the Landowner.

**27. Assignment**

All rights and obligations contained in this agreement shall extend to, be binding upon, and enure to the benefit of the heirs, executors, administrators, successors and assigns of the parties hereto respectively; and wherever the singular or masculine is used it shall, where necessary, be construed as if the plural, or feminine or neuter had been used, as the case may be. The Company shall not assign this agreement without prior written notice to the Landowner and,

despite such assignment; the Company shall remain liable to the Landowner for the performance of its responsibilities and obligations in this agreement.

28. **Site Specific Issues**

Schedule 2 is to be used to identify any site specific issues which require special mitigation and compensation.

29. **Compensation Levels**

The levels of compensation applicable to your property are set out in Schedule 1 and are based upon the criteria set out above. Kindly sign the second copy of this Letter of Understanding and initial all Appendices to indicate your acceptance of our arrangements.

Dated at \_\_\_\_\_, Ontario this \_\_\_\_ day of \_\_\_\_\_,2015.

**UNION GAS LIMITED**

\_\_\_\_\_  
Name & Title:

Dated at \_\_\_\_\_, Ontario this \_\_\_\_ day of \_\_\_\_\_,2015.

Witness:

\_\_\_\_\_  
Landowner:

\_\_\_\_\_  
Landowner:

\_\_\_\_\_  
Landowner:

\_\_\_\_\_  
Landowner:

SCHEDULE 1: SETTLEMENT

Property No.: H.M., Landowner(s): \_\_\_\_\_

The parties to this Letter of Understanding dated the \_\_\_\_ day of \_\_\_\_\_, 2015, in consideration of making this settlement have summarized below all the obligations, claims, damages and compensation arising from and for the required land rights and the pipeline construction across the Landowner(s)' property, name: \_\_\_\_\_  
(Check all applicable items of compensation)

NOTE: Refer to APPENDIX “C” within Option Agreements for site specific details

Yes    No

LAND RIGHTS

<input type="checkbox"/>	<input type="checkbox"/>	(a)	Easement @	\$	per acre.
<input type="checkbox"/>	<input type="checkbox"/>	(b)	Temporary Land Use @	\$	per acre.
<input type="checkbox"/>	<input type="checkbox"/>	(c)	Topsoil Storage Land Use @	\$	per acre

DAMAGES

<input type="checkbox"/>	<input type="checkbox"/>	(a)	Disturbance @	\$	per acre of easement.
<input type="checkbox"/>	<input type="checkbox"/>	(b)	Disturbance @	\$	per acre of Temporary Land Use
<input type="checkbox"/>	<input type="checkbox"/>	(c)	Disturbance @	\$	per acre of Top Soil Storage area

CROP LOSS

<input type="checkbox"/>	<input type="checkbox"/>	One Time Payment @	\$	per acre of easement.
<input type="checkbox"/>	<input type="checkbox"/>	One Time Payment @	\$	per acre of Temporary Land Use
<input type="checkbox"/>	<input type="checkbox"/>	One Time Payment @	\$	per acre of Top Soil Storage area

NON-AGRICULTURAL DAMAGE PAYMENTS

<input type="checkbox"/>	<input type="checkbox"/>	Non-agricultural Lands @	\$	per acre
<input type="checkbox"/>	<input type="checkbox"/>	Woodlots @	\$	per acre

OBLIGATIONS

<input type="checkbox"/>		a) This Letter of Understanding.
<input type="checkbox"/>	<input type="checkbox"/>	b) Attached as Schedule 2 any other special requirements or compensation issues.

Initialled for identification by owner(s): \_\_\_\_\_.

Approval (Union Gas Limited): \_\_\_\_\_.



SCHEDULE 2: SETTLEMENT

Property No.:H.M., Landowner(s): \_\_\_\_\_

### SCHEDULE 3

#### WOODLOT EVALUATION

At the time of signing of the Letter of Understanding the Landowners with woodlots will be given 3 options.

1. take a one time full and final for the total easement.
2. take a one time full and final for that portion of the easement in agricultural land, and have the woodlot evaluated separately.
3. take the crop monitoring program and have the woodlot evaluated separately.

Woodlots will be assessed in the following manner:

A forestry Consultant will cruise the woodlot to determine the amount of volume which could be harvested on a periodic basis from the woodlot under sustained yield management.

This volume will then be determined on an annual basis.

Current sale prices will then be given to this volume to determine an annual amount which could be harvested from the woodlot.

This value will then be present valued using the same formula as the one time payment option.

## SCHEDULE 4

### AESTHETIC TREE EVALUATION

The following procedure would be followed where a Landowner wishes to have trees on his property evaluated for aesthetic values.

During discussions for the Letter of Understanding, the Landowners would identify the trees he wishes to have evaluated for aesthetic purposes.

Union would contract a qualified person to complete an evaluation of the trees.

The Landowners would be paid the evaluated price for the trees in addition to other payments.

If trees are less than 5 inches in diameter replacement of the trees may be considered in lieu of a payment.

If the Landowner disagrees with Unions evaluation a second evaluation may be completed using the same criteria as the original evaluation.

### EVALUATION CRITERIA

A four part evaluation criteria will be completed for aesthetic trees:

Tree Value = Basic Value X Species Rating X Condition Rating X Location Rating

Basic value is estimated without consideration of condition, species or location. It is calculated by multiplying the cross-sectional area of the tree trunk by an assigned value per square inch of trunk area.

Species rating is a percentage rating based on the relative qualities of the tree species.

Condition rating is a percentage rating based on the health of the tree.

Location rating is a percentage rating based on the location of the tree.

SCHEDULE 5

Schedule of Rates for Work  
Performed by Landowners

Typically all work will be done by the Company. If the parties agree that the Landowner will perform work on behalf of the Company, the Company will remunerate the Landowner in accordance with the following;

- |    |                 |      |                                       |
|----|-----------------|------|---------------------------------------|
| 1. | Stonepicking    | - \$ | per hour/per person picking by hand   |
|    |                 | - \$ | per hour for use of tractor and wagon |
| 2. | Chisel Plowing  | - \$ | per hour                              |
| 3. | Cultivation     | - \$ | per hour                              |
| 4. | Tile Inspection | - \$ | per hour *                            |

\* Payment for Tile Inspection is for those hours spent inspecting tile at the request of the contractor.

## SCHEDULE 6

### Wet Soils Shutdown

*The following sets out the Wet Soils Shutdown practice of Union Gas Limited for pipeline construction, repair and maintenance on agricultural lands.*

While constructing the Company's pipeline the Company's senior inspectors inspect right-of-way conditions each day before construction activities commence for that day. If, in the judgment of these inspectors, the right-of-way conditions on agricultural lands are such that construction would have an adverse affect on the soils due to wet soils conditions, the contractor is prohibited from starting construction activities. The inspectors shall consider the extent of surface ponding, extent and depth of rutting, surface extent and location of potential rutting and compaction (i.e., can traffic be re-routed within the easement lands around wet area(s) and the type of equipment and nature of construction proposed for that day. The wet soil shutdown restriction would be in effect until, in the judgment of the Company representatives, the soils would have sufficiently dried to the extent that commencing construction activities would have no adverse affects on the soils.

Wet soils shutdown is a routine part of Union's normal management process for pipeline construction activities. In recognition of this, Union budgets for and includes in contract documents, provisions for payment to the pipeline contractors for wet soils shutdown thereby removing any potential incentive for the contractor to work in wet conditions.

In addition, Union's inspection staff is responsible for ensuring that construction activities do not occur during wet soils shutdown. This would include shutting down construction activities if soils became wet during the day.

It should, however, be recognized that there may be situations when construction activities cannot be carried out during the normal construction period due to delays in project timing and it may become necessary to work in wet conditions in the spring or fall of the year. Where construction activities are undertaken by the Company in wet soil conditions, additional mitigation measures may be put in place to minimize resulting damages. Mitigation measures may, where appropriate, be developed by Union on a site specific basis and may include avoiding certain areas, full easement stripping, geotextile roads, the use of swamp mats, or the use of other specialized equipment where deemed appropriate by Union. Union will authorize work in wet soils conditions only when all other reasonable alternatives have been exhausted.

## **Appendix D**

### **Conditions of Approval**

**EB-2014-0261**

**DATE: April 30, 2015**

## **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-2014-0261 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, 2017, 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 an explanation for any significant variances from the estimates filed in this proceeding.

### **2 Project and Communications Requirements**

- 2.1 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.

- 2.2 Union shall designate a person as project engineer and shall provide the name of the individual to the Board's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. Union shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the Board's Order being issued.
- 2.3 Union shall give the Board's designated representative and the Chair of the OPCC ten days written notice in advance of the commencement of the construction.
- 2.4 Union shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the Board's Order.
- 2.5 Union shall file with the Board's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Union shall 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**

- 4.1 Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, and shall provide an affidavit that all such approvals, permits, licences, and certificates have been obtained.

## **APPENDIX C: CHANGE REQUESTS**

May 11, 2016

RESS

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”)  
Dawn Parkway 2016 System Expansion Project  
Board File # EB-2014-0261**

Please find attached two Change Requests for the above-noted project.

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

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, LL.B  
Manager Regulatory Projects and Land Acquisition

cc: Zora Crnojacki, OEB Project Advisor

**ONTARIO ENERGY BOARD**  
**LEAVE TO CONSTRUCT CHANGE REQUEST**

**Project Name:** Dawn Parkway 2016 System Expansion Project  
**OEB File Number:** EB-2014-0261  
**Change Request:** #1

**Description and Rationale for Change**

Union is proposing changes on the east side of the Centre Line Road. Union requires two additional 110 m x 45m parcels of temporary land use to facilitate the construction of the pipeline.

**Construction and Restoration Practices**

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

**Environmental**

No new environmental mitigation measures will be required.

**Consultation**

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

**Lands**

Union has the necessary temporary land rights in place.

**Costs**

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

**Schedule**

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

**Maps**

A map showing the location of the additional land is attached at Schedule 1.



**ONTARIO ENERGY BOARD**  
**LEAVE TO CONSTRUCT CHANGE REQUEST**

**Project Name:** Dawn Parkway 2016 System Expansion Project  
**OEB File Number:** EB-2014-0261  
**Change Request:** #2

**Description and Rationale for Change**

Union requires additional irregular temporary land use to facilitate the construction of the pipeline. Union also requires additional temporary land use for a temporary access lane to the construction site.

**Construction and Restoration Practices**

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

**Environmental**

No new environmental mitigation measures will be required.

**Consultation**

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

**Lands**

Union has the necessary temporary land rights in place

**Costs**

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

**Schedule**

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

**Maps**

A map showing the location of the additional land is attached at Schedule 1.



July 25, 2016

RESS

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”)  
Dawn Parkway 2016 System Expansion Project  
Board File # EB-2014-0261**

Please find attached Change Request #3 for the above-noted project.

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

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,

*[original signed by]*

Mark A. Murray, LL.B  
Manager Regulatory Projects and Land Acquisition

cc: Zora Crnojacki, OEB Project Advisor



**ONTARIO ENERGY BOARD**

**LEAVE TO CONSTRUCT CHANGE REQUEST**

**Project Name:** Dawn Parkway 2016 System Expansion

**OEB File Number:** EB-2014-0261

**Change Request:** #3

**Description and Rationale for Change**

Union requires additional temporary land use, adjacent to Courtcliffe Park, in to accommodate construction of the pipeline facilities within the park.

**Construction and Restoration Practices**

There will be no additional construction or restoration practices other than those identified in Union's pre-filed evidence.

**Environmental**

No new environmental mitigation measures will be required.

**Consultation**

Union had met with the directly affected landowner and no concerns have been raised.

**Lands**

Additional temporary land rights have been obtained.

**Costs**

The addition of this work results in an estimated \$250,000 increase. These additional costs will be recovered from the contingency identified in Union's pre-filed evidence.

**Schedule**

This work can be completed within the current project schedule.

**Maps**

A map showing the location of the additional temporary land rights is shown as Part 3 and is attached at Schedule 1.

UNION GAS LIMITED

Property Sketch  
Showing Approximate Location of  
Proposed Temporary Pipeline Easement within  
PT LT 9, CON 9 EAST FLAMBOROUGH DESIGNATED AS PARTS 3 ON 62R5738 SAVE AND EXCEPT PART 1 ON 62R14252 ; S/T  
HL21432 & S/T AB180351; S/T EASEMENT IN GROSS OVER PARTS 1 & 4 ON 62R17202 AS IN WE331058; S/T EASEMENT IN  
GROSS OVER PARTS 4 & 5 ON 62R17202 AS IN WE331059; FLAMBOROUGH; CITY OF HAMILTON



					<div>050.0100.0200.0</div> <div></div> <div>metres</div> <div>SCALE 1:4000</div>				
PART	APPROX. SIZE (metres)		APPROX. AREA		PART	APPROX. SIZE (metres)		APPROX. AREA	
PIN: 17523-0437	(width)	(length)	(hectares)	(acres)	PIN: 17523-0041	(width)	(length)	(hectares)	(acres)
1 (EXISTING)	28.0	508.40	1.40	3.47					
2 (TOPSOIL)	10.0	515.40	0.51	1.26					
3 (T.L.U.)	IRR	IRR	1.18	2.91					
PIN: 17523-0437			SCALE: 1: 4000		*ALL DISTANCES ARE APPROXIMATE.			DATE: JULY 13, 2106	