ONTARIO ENERGY BOARD

OEB STAFF SUBMISSION

December 14, 2016

Union Gas Limited

Panhandle Reinforcement Project

EB-2016-0186

INTRODUCTION AND SUMMARY

In response to increasing natural gas demand from customers in the Windsor/Leamington/Kingsville area, Union Gas Limited (Union) has proposed to reinforce the Panhandle System. Union has submitted that additional capacity is required on the Panhandle System by November 1, 2017. Union has proposed to construct approximately 40 kms of NPS 36 inch pipeline from Union's Dawn Compression Station in the Township of Dawn-Euphemia to the Dover Transmission Station in the Municipality of Chatham-Kent and to complete related station modifications (the Project). The total capital cost of the Project is estimated at $264.5 million.

OEB staff submits that Union has established the need for additional supply to 2021 and has no issues with the demand growth forecast presented in Union's evidence. However, OEB staff believes that Union has not demonstrated that the Project is the best alternative to address the need, particularly given the significant demand uncertainties that Union has identified over the longer-term. Although it is clear that the Project will provide the needed capacity, in OEB staff's view, other commercial alternatives, or a combination of commercial and additional facilities alternatives, could have been pursued.

In OEB staff's view, Union did not fully explore and assess all available options to address the projected demand growth. As a result, the evidence on the record with regard to alternatives does not lend itself to a full comparative assessment of the Project versus potential alternatives. OEB staff believes that Union has been in the best position to evaluate alternatives that could have met the forecast demand, given Union's intimate knowledge of the market, gas supply planning tools, potential contractual arrangements, and incremental facility costs. However, the evidentiary record on the alternatives is not clear and seems fragmented and difficult to follow. This took away the opportunity for parties to assess the costs and benefits of potentially available alternatives.

Given the timing of Union's application and the near-term need for additional supply, however, it is not clear if any alternatives remain viable at this point in time. As a result of time constraints and a lack of alternatives having been developed by Union, there may no longer be an alternative solution to meet the forecast need. OEB staff believes that in future applications, Union should be obligated to provide more complete and comparable alternatives to proposed expansion projects. There may also be an opportunity to scrutinize plans in great detail in the next cost-based rate application given that as part of the renewed regulatory framework, 5-year system plans will be required to be filed. If the OEB approves the Project , OEB staff submits that the 20-year depreciation term and cost allocation approach proposed by Union should not be approved.

OEB staff's submission will focus on:

- The need for the Project and alternatives;
- Union's request for a 20-year depreciation period; and
- Union's proposed methodology to allocate Project-related demand costs.

The submission also indicates that OEB staff has no concerns with a comprehensive settlement agreement on land matters reached by Union and the Canadian Association of Energy and Pipeline Landowner Associations and its subcommittee, the Panhandle Landowner Committee (CAEPLA-PLC). OEB staff also has no concerns with the form of easement agreements that Union offered or will offer to the affected landowners.

The rationales for OEB staff positions are discussed below.

APPLICATION

Project and Need

Given increasing natural gas demand from customers in the Windsor/Leamington/Kingsville area, Union has submitted that the existing Panhandle System will not be able to meet the Winter 2017/2018 Design Day demand of 623 TJ/day. Design Day represents the capacity required on the coldest day and is used by Union for infrastructure planning purposes. In order to provide service to new general service and contract customers, Union has stated that additional capacity of 106 TJ/day is required on the Panhandle System by November 1, 2017. The following is the incremental demand growth by year:

Design Day requirements (demand forecast) 2017-2021

	Total (TJ/d)	**Incremental demand (TJ/d)**	
2016/2017 (current)	565	---	
2017/2018 Year 1	623	58	(includes 48 TJ/day Leamington)
2018/2019 Year 2	638	15	
2019/2020 Year 3	651	13	
2020/2021 Year 4	661	10	
2021/2022 Year 5	671	10	
		Total 106 TJ/d	

Reference: Exhibit A, Tab 5, page 8 Table 5-1

Note: Year 1- incremental demand of 58 TJ/day includes 48 TJ/day of unmet demand Greenhouse Leamington/Kingsville customers who are currently interruptible but desire firm service.

Costs and Rate Impacts

The total capital cost of the Project is estimated at $264.5 million. Union is seeking approval of the recovery of the cost consequences of the Project as part of this proceeding, given that the Project meets the capital pass-through criteria determined in Union's 2014-2018 Incentive Regulation Mechanism proceeding (EB-2013-0202).

The rate impacts result from the following factors: direct costs of the Project, Union's use of a 20-year depreciation term, and a change in the cost allocation methodology for the existing Panhandle System.

Union is seeking approval of a 20-year depreciation term for the proposed assets as opposed to the typical OEB-approved depreciation period of approximately 50 years. Union is seeking this change as a result of uncertainty in the future demand profile of gas in Ontario created by the Province's Cap and Trade Program. The Cap and Trade Program aims to reduce the emissions of greenhouse gases by promoting the use of clean energy alternatives and imposing a price on carbon.

The total revenue requirement associated with the Project is approximately $5.0 million in 2017, increasing to $27.2 million in 2018. The rate impact for a typical residential customer in the South service area is approximately 2%. However, the rate impact for commercial and contract customers in the South service area is significant, ranging from 14% to 27% for M4, M7, T1 and T2 direct purchase customers. Union's evidence shows lower rate impacts of 10% to 18% for the same classes of direct purchase customers if the OEB-approved depreciation rate is used.[1]

Union's existing cost-allocation methodology allocates costs based on the combined Panhandle System and St. Clair System. Union has noted that with the addition of the significant project costs related only to the Panhandle System and no change to the cost of the St. Clair System, the use of the combined system for cost allocation purposes no longer reflects the costs to serve the customers on each transmission system.

Union has proposed to allocate the Panhandle System demand costs related to the Project in proportion to the firm Union South in-franchise Panhandle System Design Day demands, updated to include the incremental Project Design Day demands. Union

[1] Union Evidence Exhibit A, Tab 3, page 8, Table 3-1"Bill Impacts of the Panhandle Replacement by Rate Class"

has also proposed to not update the Rate C1 firm long-term transportation rates between Dawn and St. Clair, Ojibway and Bluewater and the Rate M16 west of Dawn demand rate for the Project costs during the IRM term.

Union has stated that its proposed interim allocation of Project costs based on the Panhandle System Design Day demands better reflects the principles of cost causality during the remainder of the IRM term than the current OEB approved methodology. Union has submitted that this approach better reflects how ex-franchise Rate C1 and Rate M16 customers use the Panhandle System on Design Day. Under Union's proposal, ex-franchise Rate C1 and Rate M16 customers have not been allocated any Project-related demand costs.

STAFF SUBMISSION

Need for the Project

Union has stated that the Design Day demand of the Panhandle System is forecasted to grow from 565 TJ/day to 671 TJ/day by 2021. OEB staff's view is that Union has established the need for additional supply to 2021 and OEB staff has no issues with the demand growth forecast presented in Union's evidence. However, the OEB staff view is that there may have been better alternatives to address the need, particularly given the significant demand uncertainties that Union has identified over the longer-term.

Alternatives

Union has stated through the course of the proceeding that it considered several alternatives, but that the Project is the best approach to provide the incremental capacity of 106 TJ/day of forecasted five year firm Design Day growth[2].

Given the significant demand uncertainties that Union has identified over the longer-term related to the Cap and Trade Program, a key question in this proceeding is whether there is a viable alternative that could defer the Project by a number of years to allow a better understanding of the impacts of the Cap and Trade Program and to avoid committing potentially underutilized infrastructure.

OEB staff does not believe that alternatives have been given adequate consideration by Union. OEB staff is of the opinion that Union should have pursued other alternatives that may have been more flexible and less costly ways of meeting the incremental demand growth from 2017 to 2021.

OEB staff believes that several alternatives, including lower cost facility alternatives,

[2] Exhibit A, Tab 6, Page 2

commercial third-party alternatives, alternate transportation arrangements, and combinations of non-facility and facility alternatives could have met the required incremental capacity identified by Union for the winter period. Although the record is difficult to follow and not particularly clear, OEB staff will outline some of the potential alternatives and options that, in its view, on a stand-alone basis or in combination could have been more viable ways of meeting the need.

Ojibway Imports

Union's Panhandle System is connected to the Panhandle Eastern Pipeline (PEPL) at Ojibway import connection, which is an US/Canadian international point under the Detroit River. PEPL firm transportation capacity is 185 TJ/Day and the maximum volume allowed to be transported through the Ojibway point is 215 TJ/day as determined by a Presidential Permit. Out of 185 TJ/Day of firm available capacity at the PEPL, Union has 60 TJ/Day, Rover has 80 TJ/Day, other shippers have 20 TJ/Day. This leaves 25 TJ/Day of transportation capacity at the PEPL to be potentially contracted imported by Union at Ojibway.[3]

The first potential alternative in OEB staff's view would have been for Union to contract for additional capacity at Ojibway. As described above, Union has contracted for long-term capacity of 60 TJ/day through Ojibway, however it needs an additional 58 TJ/day for winter 2017/2018, rising to 106 TJ/day to meet the demand forecasted for 2021.

One of the challenges identified by Union through the proceeding with respect to commercial third-party alternatives and alternate transportation arrangements has been the apparent lack of liquidity at Ojibway.

Union's argument has consistently focused on the difficulty to obtain additional capacity on the PEPL and the impact on diversity of supply. Union has argued that the market at Ojibway is not liquid and Union may have to pay a premium for the transportation capacity as well as the commodity.

OEB staff submits that the costs at Ojibway may be higher than Dawn, but do not seem to be significantly higher than other options. At the oral hearing, Mr. Wolnik of APPrO explored the pricing of transportation capacity. An undertaking response (J2.6) reveals that the toll for the Panhandle Eastern Field Zone to Ojibway is a modest 52 cents per GJ while the toll for ANR Defiance to Union Ojibway is 13 cents per GJ. This would mean that even with the addition of these transportation costs, the overall cost to supply customers in the Windsor/Leamington/Kingsville area would be lower than with the

[3] Union's Argument-in-Chief, page 13, paragraphs 42 and 43.

construction of the proposed facilities[4].

Union has further argued that buying significant quantities of supply from Ojibway would adversely impact their portfolio diversity. OEB staff submits that this argument probably assumes the contracted supply is coming in year round. OEB staff and intervenors in their cross-examination proposed winter only deliveries. Nevertheless, OEB staff submits that, if the Project is constructed, ratepayers will pay estimated $264.5 million in additional infrastructure costs for the supply diversity benefit. It is not clear that this is a reasonable price to pay for an increase in supply diversity.

In terms of importing capacity at Ojibway, Union stated that it has the operational ability to accept a maximum of 115 TJ/day on a yearly basis, which rises by an additional 25 TJ/day during the winter to 140 TJ/day.[5] Union acknowledged that if it could obtain the 140 TJ/day of firm capacity during the winter it would not need the Project to serve the 2017 and 2018 demand. In fact, over this period, there would be a surplus of 17 TJ/day[6], enough to also meet the following year's forecast demand.

To obtain the additional 25 TJ/day increase relative to the amount available in summer, Union may be able to enter into short-term arrangements. Although Ojibway may not be as liquid a hub as Dawn, OEB staff does not believe Union's contention that Ojibway is not a liquid hub is strictly accurate. During the oral hearing, Union acknowledged that it can purchase an additional 25 TJ/day capacity during the winter months at Ojibway[7].

If Union could contract for winter peaking service, it could meet the incremental demands for the next couple of years without additional infrastructure. Although this option would not meet all forecasted demand to 2021, it would provide time to better understand the impact of the Province's climate change initiatives on demand and to more thoroughly consider non-infrastructure alternatives for meeting longer-term demand. OEB staff submits that Union could have pursued this option and then re-examine its capacity requirements and total supply portfolio after a number of years of experience with Cap and Trade, and re-apply for any additional infrastructure if required at that time.

[4] According to Union, the revenue requirement for 2018 is $27.2 million. For the Project as proposed by Union, with the demand of 106 TJ/day (106,000 GJ/day) the cost per GJ is 70 cents per GJ ($27,200,000/106,000*365). This is significantly higher than 52 cent per GJ toll Union cited for the Panhandle Eastern Field Zone and even more so than 13 cents per GJ toll for ANR Defiance to Union.
[5] Union Argument-in-Chief pages 12, paragraph 39
[6] Oral Hearing, Tr. 2, Pages 42-43, lines 28-5
[7] Oral Hearing, Tr.2, Page 43 lines 1-5

Contracts for Additional Capacity with Rover

Another potential alternative in OEB staff's view could have been for Union to use certain market based approaches to get additional capacity during the winter. Union could acquire supplies through Ojibway using an exchange service. Union did discuss this option with Rover as revealed at the oral hearing. Union would buy the supply at Dawn from a Rover shipper, and then Rover would route that gas through the PEPL to flow to Ojibway[8].

Union filed evidence illustrating the communication between Union and Energy Transfer/Rover on November 22, 2016 which revealed that Rover has been willing and able to offer capacity to Union through Ojibway. The letter dated November 17, 2016 shows that Rover was willing to offer 57,000 to 95,000 Dth/day of capacity (approximately 60 TJ/day to 100 TJ/day)[9] for a period of ten years. Union also has an additional 25 TJ/day of firm capacity available during the winter as noted at the oral hearing and the Argument-in-Chief, and described above[10].

At the oral hearing, APPrO asked Union whether it had considered the option of purchasing transportation capacity from the PEPL at Defiance to Windsor and using it on a peaking-only basis. The record indicates that Union had clearly not examined such alternatives.

In its request for additional long-term firm transportation capacity on the PEPL, one of the alternatives that Union stated it had considered, Union sent a Request for Proposal (RFP) to Rover shippers. However, Union did not send the RFP letter to all Rover shippers. Also, Union provided only one business day for shippers to respond and requested a service date of November 1, 2016 as opposed to November 1, 2017[11] that would have aligned the request with the in-service date of the new Rover pipeline. This would have allowed shippers to offer Union the new capacity that they have acquired on the Rover system. As a result, Union did not receive any response to its RFP for additional long-term firm transportation. Union's approach in considering this alternative was, in OEB staff's view, inadequate.

It is evident from the above argument that Union did not make a concerted effort to obtain the required capacity. Although there may not be a single market-based approach to address the capacity shortfall, there are certainly a combination of measures that Union could adopt to alleviate the capacity constraint. Union clearly did

[8] Oral Hearing, Tr. 2, Page 69, Lines 23-28
[9] I Dth = 0.0010548 TJ
[10] Union Argument-in-Chief, page 13
[11] Oral Hearing, Tr. 2, Page 158, Lines 14-20

not explore all options, especially commercial third-party options.

Second Compressor at Sandwich

Another potentially viable alternative to the Project is the addition of a second compressor at Sandwich. Union has estimated the cost of a second compressor at $31 million[12]. This would increase the winter deliveries to 197 TJ/day which, as per the application, would fulfill the incremental needs of Union. It would also allow Union to move surplus gas east of Sandwich when the delivered volumes are not required in the Windsor market[13]. Union has indicated that the Sandwich compressor could move 80 TJ a day. If Union was able to provide the additional quantities from Dawn or through a mix of additional supplies from the PEPL and Dawn supplies, it would meet the entire incremental needs of Union.

OEB staff adds that Union has stated that it can acquire an additional 25 TJ/day during the winter from the PEPL[14]. Assuming that Union can move an additional 80 TJ/day using the Sandwich compressor and the 25 TJ/day from the PEPL, the total volumes would equal to 105 TJ/day which would meet the forecast need of 106 TJ/day.

Other approaches to acquire the required capacity through Ojibway have been discussed earlier including providing an exchange service and purchasing transportation capacity from the PEPL at Defiance to Windsor on a peaking-only basis, and these options could also serve to meet the incremental demand.

Union discussed a number of alternative approaches to get the incremental capacity. However, all options assume deliveries year round. Union did not consider options that included winter only deliveries. Union has acknowledged that the incremental volumes are only required during the winter. OEB staff therefore fails to understand why options that meet peak demand have not been considered by Union.

Union’s Request for a 20-Year Depreciation Period

If the OEB approves the Project, OEB staff submits that Union’s request for a 20-year depreciation period should be denied.

Union has indicated that the uncertainty created by the proposed introduction of the Cap and Trade Program and the Province’s Climate Change Action Plan has driven the need for Union to calculate the revenue requirement and resulting rate impacts based on an estimated 20-year useful life of the Project assets. The current approach,

[12] Exhibit JT 1.7
[13] Oral Hearing, Tr. 2, Page 78
[14] Oral Hearing, Tr. 2, Page 140

approved by the OEB, is to use weighted average useful life of approximately 50-years based on OEB approved depreciation rates.

Union has argued that depreciating the asset over a 20-year useful life better aligns the cost with the timing of the government reported restrictions and potential elimination of natural gas heating in homes and businesses.

OEB staff sees no reason to depart from OEB approved amortization rates.

The shorter depreciation horizon effectively results in higher rates for Union's ratepayers as compared with the 50 year depreciation horizon. It forces Union's ratepayers to bear the Cap and Trade related risk, rather than sharing the risks between the shareholder and ratepayers.

In addition, the uncertainty related to the Province's Cap and Trade Program applies to all of Union's assets. Should Union require a different treatment for the amortization of its assets, it should raise this issue at its next rebasing proceeding.

Union's Proposed Methodology to Allocate Project-Related Demand Costs

If the OEB gives leave to construct the Project, OEB staff submits that the Union's request for departure from the OEB approved cost allocation method should be denied.

Union's existing cost-allocation methodology allocates costs based on the combined Panhandle System and St. Clair System. Union has noted that with the addition of the significant project costs related only to the Panhandle System and no change to the cost of the St. Clair System, the use of the combined system for cost allocation purposes no longer reflects the costs to serve the customers on each transmission system.

Union has submitted that its proposed interim allocation of Project costs based on the Panhandle System Design Day demands better reflects the principles of cost causality during the remainder of the IRM term than the current OEB approved methodology.

The IRM framework delineates costs from revenues and rates are adjusted annually using a formulaic adjustment during the IRM plan term. There are no provisions for such rate adjustments under the OEB-approved 2014-18 IRM framework for Union. Changes to a cost allocation methodology are generally dealt with at the time of rebasing, not during the IRM plan term.

OEB staff does not oppose the rationale of Union with respect to a change in the cost allocation of the combined Panhandle and St. Clair System. However, OEB staff submits that the changes sought by Union are not appropriate during an IRM term. In Union's 2014 IRM rates application, Union submitted that there was no need to change the cost allocation methodology for the Kirkwall metering costs during an IRM term. Union noted, "Union is operating under a Board-approved incentive regulation mechanism. Rates are to be adjusted mechanistically"[15].

Accordingly, OEB staff submits that assessing whether approaches to cost allocation reflect the principles of cost causality should be done with other major adjustments during a rebasing application. Such changes are not appropriate during an IRM term when adjustments should largely be mechanistic.

Settlement Agreement between Union and CAEPLA-PLC

In a letter dated December 2, 2016 CAEPLA-PLC informed the OEB that it reached and ratified a comprehensive settlement agreement with Union and as such has no unresolved issues related to the proceeding. Union on December 2, 2016 filed with the OEB a summary of the settlement agreement and included in the appendix a Form of Easement Agreement Addendum which was also a result of the settlement process (Addendum). Union stated that it would enter into the Addendum agreement with all the landowners that already have an existing easement agreement.

OEB staff has no concerns with the comprehensive settlement agreement on land matters reached by Union and CAEPLA-PLC.

Form of Easement Agreement

Union also filed on the record a Form of Easement Agreement to be offered to all the landowners that have no existing agreement along the route of the proposed pipeline. The approval of forms of easement agreements is required under section 97 of the OEB Act.

OEB staff has no concerns with the form of easement agreements that Union offered or will offer to the affected landowners.

All of which is respectfully submitted.

[15] Union Argument-in-Chief, EB-2013-0365, Page 4, Para 15