

September 30th, 2013

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

Dear Ms. Walli:

**RE: Union Gas Limited ("Union") - Undertakings
EB-2012-0451/EB-2012-0433/EB-2013-0074**

Please find attached Union's responses to the following Undertakings in the above captioned proceeding:

J3.3; J3.6; J4.5; J4.6

Yours truly,

[original signed by]

Karen Hockin
Manager, Regulatory Initiatives
Encl.

cc: Crawford Smith, Torys
All intervenors

UNION GAS LIMITED

Undertaking of Mr. Isherwood

To Mr. Quinn

To provide calculation of expected toll with Energy East Project included.

Please see response to J4.5 for the range of tolls. With respect to Energy East, Union is not in a position to estimate the impact, if any, of this Project on tolls. In Union's view however, the Project is not a relevant consideration as the impact will be the same regardless of whether the Settlement Term Sheet is approved by the NEB or not.

UNION GAS LIMITED

Undertaking of Mr. Henning
To Mr. Shrybman

To produce analysis of competition for Marcellus and Utica shale gas.

The following response was provided by ICF International.

With the prolific volumes of gas currently being produced from the Marcellus shale play, the expectation for further growth in production in both the Marcellus and Utica Shale plays, and the associated decline in natural gas prices, a number of markets are seeking to access these economic gas supplies. In addition to the markets in Ontario and Québec, LDCs and gas-fired generation in New York and New England are seeking access to the Marcellus and Utica shale supplies. If approved and implemented, a settlement consistent with the principles of the Settlement Term Sheet combined with facilities that “debottleneck” the Parkway to Maple constraint will allow Ontario, Quebec, New York and New England to receive gas supplies via the Eastern Ontario Triangle.

In addition, growing power generation requirements for gas in the Mid-Atlantic states will access gas supplies from the Marcellus and Utica shale formations, first by displacement of the traditional south to north gas flows on the long-haul pipelines from the Gulf of Mexico and ultimately via physical reversal of flow during the summer month. Similarly, growing power generation requirements in the Southeastern U.S. are likely to also access Marcellus and Utica shale supplies, predominantly in the summer months. Finally, the existing Cove Point LNG import facility recently received approval to export LNG to non-free trade countries. If LNG export capacity is developed at this site, the facility will access production predominantly from the Marcellus.

The ICF Base Case reflects all of these various potential sources of demand for Marcellus and Utica shale gas. The Base Case analysis concludes that the resource base in the Marcellus, Utica and other shale formations across North America is sufficient to meet these requirements at competitive prices.

UNION GAS LIMITED

Undertaking of Mr. Isherwood
To Mr. DeRose

To update analysis with actual tolls.

This analysis is in response to the request for a review of the impact of the Settlement Term Sheet on Union's estimate of the forecast gas cost savings reflected in the pre-filed evidence, as updated August 23, 2013. In preparing the analysis Union has considered the savings in the event the effects of the Term Sheet are approved by the National Energy Board and in the event they are not.

1. Toll Certainty with a Settlement

a) Toll Benefits of the Settlement

- i. Reduction in ROE and Financial Contribution by TCPL. Under the Settlement, TCPL will be making two significant contributions. First, TCPL has agreed to an ROE of 10.1% as opposed to the NEB approved ROE of 11.5% – this contribution is estimated at approximately \$35M/yr or \$210M over the 6 year toll agreement. Second, TCPL has agreed to provide a \$20M/yr contribution or \$120M over the 6 years. In total, TCPL has agreed to provide \$330M in relief. These contributions result in settlement tolls being lower than they otherwise would be under the no settlement scenario.
- ii. Segmentation of the EOT. EOT shippers will only contribute to the shortfall resulting from the conversion to short haul for the first six years (although it is amortized over 16 years).

b) Impacts of TCPL Changes on Union Customers

In addition to market access, the settlement provides for toll certainty. In its updated, pre-filed evidence, Union calculated the forecast gas cost savings based on TCPL's compliance tolls to be the \$15.4M/yr.

Customers that shift from long haul to short haul will create a revenue deficiency on the TCPL system. Under a cost of service framework, any revenue deficiency would be captured through toll adjustments on the TCPL system. Union has calculated the impact

of the toll changes on TCPL as they impact Union's supply costs as follows.

a) Assume all of the revenue impact on TCPL is allocated to the Eastern Ontario Triangle (as of Nov 1, 2016)

- Total Transportation Savings (Long Haul to Short Haul) - \$35.7M
- Union's total EOT transportation = 315,000 Gj/d
- Total EOT transportation (all shippers) = 4,500,000 Gj/d
- Union as a percent of total $(315,000/4,500,000) = 7\%$

Therefore, Union System Customers would pay 7% of the \$35.7M or \$2.5M each year. In this scenario, the \$15.4M of annual gas cost savings would be reduced to \$12.9M.

b) Assume the revenue impact to TCPL is allocated to all shippers on TCPL

- It is expected that 15 basis points of the 50% increase in short haul tolls will be a surcharge to recover revenue deficiencies on the Prairies and Northern Ontario Line. For the short haul toll from Parkway to the TCPL EDA, a 50% increase represents 12.5 cents/Gj.
- 15 basis points would represent 3.75 cents per Gj for all shippers on the Mainline system. Assuming the conversion from long haul to short haul is the predominate driver of the 3.75 cents, Union has assumed that 3 cents is directly attributable to the conversion cost (there is also some general deficiencies that would be recovered as well and is assumed to be the remainder of the surcharge).
- Union's total capacity on the TCPL system is approximately 530,000 Gj/d (includes long haul, short haul and STS).
- Therefore, the total cost for Union supply would be $3 \text{ cents} \times 530,000 \times 365\text{d} = \5.8M
- In this scenario, Union's annual gas cost savings would be reduced from \$15.4 to \$9.6M

In this second example, the 3 cent surcharge recovers not only the impact of Union's 2015 conversion to short haul, but also the short haul conversion costs from all shippers forecast for 2015 and 2016. In recent discussions with TCPL it has proposed allocating the conversion impact to all customers as assumed in this example.

2. Expected Tolls

Path	Compliance Tolls (\$/Gj)	Tolls- 45% SH Increase (\$/Gj)	Tolls- 55% SH Increase (\$/Gj)
Empress to Enbridge EDA	1.62	1.83	1.94
Empress to Enbridge CDA	1.57	1.77	1.88
Empress to Union EDA	1.65	1.87	1.98
Empress to Union NDA	1.32	1.41	1.49
Empress to Union CDA	1.54	1.74	1.85
Parkway to Enbridge EDA	0.32	0.46	0.50
Parkway to Enbridge CDA	0.12	0.17	0.19
Parkway to Union EDA	0.25	0.36	0.39
Parkway to Union NDA	0.36	0.52	0.56
Parkway to Union CDA	0.10	0.14	0.15

Note: For case of 45% increase to short haul tolls, Union has assumed that long haul toll to EOT increases by 13% and all other long haul paths increase by 7%. In the case of 55% increase to short haul tolls, Union has assumed that long haul toll to EOT increases by 20% and all other long haul paths increase by 13%. Although the unit increase in long haul tolls reflected in the above ranges is higher than the unit increase in short haul tolls, the difference is a function of the different recovery periods for the long haul and short haul surcharges (6 years vs.15 years, respectively). Over the settlement period, the toll differential is expected to be approximately the same as the differential in the Compliance Tolls.

3. Toll uncertainty without a Settlement

In RH-003-2011, the NEB-approved two deferral accounts to address TCPL revenue variances. The first, LTAA, had a balance of approximately \$300M at the start of 2013. This amount was expected to increase by a fixed amount of \$95M per year over the 5 year period (2013-2017). By the end of 2017, the LTAA would have a balance of approximately \$800M.

The balance in the second account, the Toll Stabilization Account (TSA), is a function of TCPL's financial performance relative to the throughput forecast approved by the NEB in RH-003-2011. Variances from the forecast (positive or negative on annual revenue) accrue in this account. The TSA therefore reflects throughput forecast risk.

Also relevant to any toll assessment is whether access to Dawn is or is not available. In the event TCPL could not or would not provide access to Dawn during the period (whether because of revenue risk or otherwise), the landed gas of cost in the Ontario EDA would be high (see Undertaking J3.5). In this scenario, the AECO basis (relative to Henry Hub) is expected to increase by approximately 34 cents/Gj – exceeding the impact of the Settlement Term Sheet (an increase of approximately 12.5 cents/Gj).

In the event access is available and provided by TCPL, any shortfall resulting from long haul and short haul conversion in 2015 or 2016 would accrue in the TSA and create further toll uncertainty. In this respect, it is Union's view that Fundamental Risk to the Mainline has not been realized or even if it has, that TCPL would likely not be exposed to material financial risk. In the result, any balance in the TSA would be the shippers' responsibility and the impact reflected in tolls.

UNION GAS LIMITED

Undertaking of Mr. Hockin
To Mr. Quinn

To run DCF analysis with anticipated savings.

The attached DCF filed as Schedule 9-3A has been re-run using gas cost savings of \$9.6 million per year (Attachment 1) and \$12.9 million per year (Attachment 2) as outlined in Undertaking J4.5. Gas savings are for a period of 15 years in each case. No other inputs have changed. The resulting 30 yr DCF has the following resulting.

Case	Annual Gas Savings (\$ Millions)	PI	NPV (\$ Millions)
Attachment 1	\$9.6	1.01	\$1.8
Attachment 2	\$12.9	1.13	\$27.4

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]