

September 20th, 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:

J1.2; J1.3; J1.4; J1.5; J3.1; J3.2; J3.4

Yours truly,

[original signed by]

Karen Hockin
Manager, Regulatory Initiatives
Encl.

cc: Crawford Smith, Torys
All intervenors

UNION GAS LIMITED

Undertaking of Mr. Henning

To Mr. Brett

Please provide the volume for industrial gas use for 2013.

The volume of industrial gas use for 2013 in EB-2013-0074, Schedule 4-1, Exhibit 3-1 is 234 BCF.

UNION GAS LIMITED

Undertaking of Mr. Henning

To Mr. Brett

Please provide the annual increase in consumption for power generation from 2013 to 2025.

The average annual growth rate in consumption for Power Generation in EB-2013-0074, Schedule 4-1, Exhibit 3-1 is 6.2%. This growth includes an allocation for the electric power generation portion of distributed generation and combined heat and power (CHP) located at industrial and commercial customer sites as well as on the electric distribution grid. It also includes natural gas fired-generation used to complement variable generation resources such as wind and, to a much lesser extent, solar generation. The 2013 value is a projected value made at the time of preparing the Exhibit.

UNION GAS LIMITED

Undertaking of Mr. Rietdyk
To Mr. DeRose

Please provide estimate of cancellation costs over relevant timeline.

Unmitigated Cancellation Costs (\$Millions)¹	31-Aug-13	31-Dec-13	31-Mar-14
Parkway D	\$0.23	\$4.19	\$18.47

¹Cancellation costs are unmitigated. Union is obligated to mitigate as much of the cancellation cost as possible (i.e. Selling land, selling or re-using purchased material elsewhere on the system).

UNION GAS LIMITED

Undertaking of Mr. Rietdyk

To Mr. DeRose

Please provide estimate of capital costs if leave to construct is not granted.

Unmitigated Cancellation Costs (\$Millions)¹	31-Aug-13	31-Dec-13	31-Mar-14
Parkway West	\$34.38 ²	\$52.04	\$83.36

¹Cancellation costs are unmitigated. Union is obligated to mitigate as much of the cancellation cost as possible (i.e. Selling land, selling or re-using purchased material elsewhere on the system).

²The majority of Parkway West cancellation costs to date are related to the land purchase (\$28.61 MM).

UNION GAS LIMITED

Undertaking of Mr. Redford
To Dr. Higgin

To create a chart of actual or forecast Design-Day quantities.

The modeled Design Day flow at Parkway can be found at Exhibit I.A1.UGL.BOMA.54 part a). During the Winter of 2011/2012, Union experienced actual flows of 1.9PJ/d (as can be seen in Exhibit I.A1.UGL.BOMA.44 Attachment 1 page 35), which is higher than the previously filed Design Day flow of 1.7PJ/d.

Modeled Design Day Flows		
	PJ/d	BCF/d
W05/06	0.5	0.46
W06/07	1.0	0.93
W07/08	1.4	1.30
W09/10	1.3	1.21
W10/11	1.3	1.21
W11/12	1.7	1.58
W12/13	2.3	2.13
W13/14	2.3	2.13
W14/15	2.3	2.13
W15/16	3.4 ¹	3.15

¹ Modeling assumes 195, 532 GJ/d of turnback as per Exhibit I.A1.UGL.Staff.10 part c).

UNION GAS LIMITED

Undertaking of Mr. Isherwood

To Mr. Quinn

To remove demand component from methods 1, 2 and 3 and provide only commodity and fuel rates.

Please see Attachment 1, which reflects Exhibit JT2.5 with demand charges removed.

Union notes that analysis which omits demand charges does not reflect the true incremental cost of acquiring either Dawn-Parkway-Enbridge CDA ("on the path") transportation or Dawn-Emerson-Enbridge CDA ("around the horn") transportation. Since both options would represent incremental transportation capacity, the total cost of this capacity (demand + commodity + fuel charges) should be considered incremental costs.

Toll and Fuel Comparison - Dawn to Enbridge CDA**Method 1 - On Path**

Line No.	a.1 Demand (\$/GJ)	a.2 Commodity (\$/GJ)	b Fuel (%)	c Fuel (\$/GJ)	d TOTAL (\$/GJ)
1 Dawn - Enbridge CDA	\$0.2276	n/a (1)	0.15% (2)	\$ 0.0054 (3)	\$ 0.233

Method 2 - Around the Horn, Cost of Facilities Used

	Demand (\$/GJ)	Commodity (\$/GJ)	Fuel (%)	Fuel (\$/GJ)	TOTAL (\$/GJ)
2 Dawn - Dawn(TCPL)	\$0.0072	n/a (4)	0.51% (4)	\$ 0.0183 (3)	\$ 0.026
3 Dawn(TCPL) - St. Clair	\$0.0783	n/a (5)	0.02% (2)	\$ 0.0007 (3)	\$ 0.079
4 St. Clair - Emerson	\$0.0863	\$ 0.0119 (6)	1.00% (2)	\$ 0.0362 (3)	\$ 0.134 (7)
5 Emerson - Enbridge CDA	\$1.1067	n/a (8)	1.17% (2)	\$ 0.0424 (3)	\$ 1.149
6 Full Path	<u>\$ 1.2785</u>	<u>\$ 0.0119</u>		<u>\$ 0.0976</u>	<u>\$ 1.388</u>

Method 3 - Around the Horn Toll, Applying TCPL System Average Unit Cost for Distance Calculation

	Demand (\$/GJ)	Commodity (\$/GJ)	Fuel (%)	Fuel (\$/GJ)	TOTAL (\$/GJ)
7 Dawn-Emerson-Parkway	2.2142	n/a (9)	see above	\$ 0.0976 (10)	\$ 2.312

Notes:

- (1) Exhibit B40, Adobe p. 58, Attachment 12.3: Toll Design, Tab 3 – 2013, Toll Design Schedule 5.2 Revised June 29, 2012, p. 19, line 32
- (2) Fuel percentages as per Exhibit B71, U-38, page 2 of 2; Fuel % to Union CDA used as proxy for fuel % to Enbridge CDA
- (3) Applies gas cost of \$3.62/GJ, average monthly NYMEX plus basis curve from ICE, August 27 9:45am
- (4) Union C1 Rate Schedule effective 2012-07-01; Fuel % is a blended rate of the seasonal fuel required per C1 rate schedule, which differs from the 0% fuel provided by TransCanada in U-38
- (5) Exhibit B40, Adobe p. 58, Attachment 12.3: Toll Design, Toll Design Schedule 5.2 Revised June 29, 2012, p. 19, line 45
- (6) Demand charges shown in Exhibit B64, U-32 Contracts FT16128 and FT17190, Adobe p. 23 and p. 27, prorated 70%/30% to achieve blended toll; Exchange Rate \$0.99 CDN/USD; Commodity and ACA charges shown in Exhibit B5-2, Adobe p.48, Attachment 12.1, Tab 2, Schedule 2.1, line 24-25
- (7) TCPL notes in Exhibit B71, U-38 that GLGT has not charged for fuel on the St. Clair to Emerson TBO path
- (8) Exhibit B40, Adobe p. 45, Toll Design Schedule 5.2 Revised June 29, 2012, p. 6, line 22
- (9) Distance of path is 3,887 km (Exhibit C56-8-2, Adobe p.38, the MAS's Evidence, p. 32);
- (10) Uses fuel calculation from Cost of Facilities Used (Method 2)

UNION GAS LIMITED

Undertaking of Mr. Henning

To Mr. Quinn

To provide Empress number used as a basis for Table 3-7.

The average price at Empress used to develop the Updated Table Exhibit 3-7 found in EB-2013-0074 Schedule 4-1 is \$5.499 (Nominal CAD/GJ).