

500 Consumers Road
North York, Ontario
M2J 1P8
PO Box 650
Scarborough ON M1K 5E3

Shari Lynn Spratt
Supervisor Regulatory Proceedings
Telephone: (416) 495-5499
Fax: (416) 495-6072
Email: EGDRRegulatoryProceedings@enbridge.com



October 18, 2013

VIA COURIER, EMAIL and RESS

Ms. Kirsten Walli
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Re: Enbridge Gas Distribution Inc. ("Enbridge")
EB-2012-0451 - Greater Toronto Area ("GTA") LTC Project
Undertaking Response

Enclosed please find Enbridge's response to Undertakings J9.1, J9.6 to J9.9 from the hearing held on September 26, 2013.

As with previous submissions, the confidential version of the response to Undertaking J9.8 will be provided to the parties who have signed the Declaration and Undertaking.

Included in the package please find the updated responses to J6.X and J6.10. The responses have been updated in accordance with the corrections provided in the testimony from the hearing day held on October 10, 2013. (Transcript Volume 9, Lines 2 to 19, page 136)

This evidence is being filed through the Ontario Energy Board's Regulatory Electronic Submission System and all of the GTA evidence can be found on Enbridge's website at www.enbridgegas.com/gtaproject.

Please contact me if you have any questions.

Yours truly,

[original signed]

Shari Lynn Spratt
Supervisor Regulatory Proceedings

Encl.

cc: EB-2012-0451, EB-2012-0433, and EB-2013-0074 Interested Parties

UNDERTAKING J9.1

UNDERTAKING

TR 9, page 43

EGD to provide the expected annual total bill impact for charges by rate class that flow from applications and the settlement agreement.

RESPONSE

The Company has determined that the impact on its gas costs stemming from the Settlement Agreement term sheet will be in the range of \$50.0 to \$68.0 million dollars relative to its October 1, 2013 gas costs¹. The following estimated bill impacts were determined on the mid-point of the range or approximately \$60 million. The bill impacts are relative to the October 1, 2013 QRAM rates currently in effect.

Impact relative to October 1, 2013 QRAM

<u>Rate Class</u>	<u>Total Bill Impact</u>
1	2.2%
6	2.7%
9	1.8%
100	2.5%
110	2.7%
115	2.9%
135	2.9%
145	2.6%
170	3.1%
200	3.2%

The annual dollar impact for an average residential customer would be approximately \$18. There is no impact on Unbundled rates 125 and 300.

The impacts of the GTA Project on distribution rates and total bill impacts were previously filed in Exhibit A, Tab 3, Schedule 9, pages 15-16.

¹ Page 2 of Undertaking J6.X

Witness: A. Kacicnik

UNDERTAKING J9.6

UNDERTAKING

TR 9, page 133

Union to modify timelines in Exhibit K8.1 to include Parkway West Gate Station.

RESPONSE

Please see the attachment for an update to Exhibit K8.1 to include the construction timelines for Enbridge's proposed Parkway West Gate Station.

Witness: C. Fernandes

Project Interdependency Table

Facility	Union Parkway West Project	Union Parkway D Compressor	Union Brantford to Kirkwall Loop	Enbridge Parkway West Gate Station A ¹	Enbridge GTA Segment A	Enbridge GTA Segment B	TCPL King's North Project
Union Parkway West Project		B		I ¹	I ³	I ⁴	I ²
Union Parkway D Compressor			I ³		I ³	I ⁴	I ²
Union Brantford to Kirkwall Loop							
Enbridge Parkway West Gate Station A ¹		I ¹					
Enbridge GTA Segment A		I	I ³	I ²		I ⁴	I ²
Enbridge GTA Segment B					I ⁵		
TCPL King's North Project			I ²	I ²	I ³		

A- Includes the gate station, tie-in and Parkway Bypass regulation station.

B- Without the construction of Parkway West, the allocation of costs for Parkway D would be different. For further reference please see Exhibit I.UGL.LPMA.2 part b).

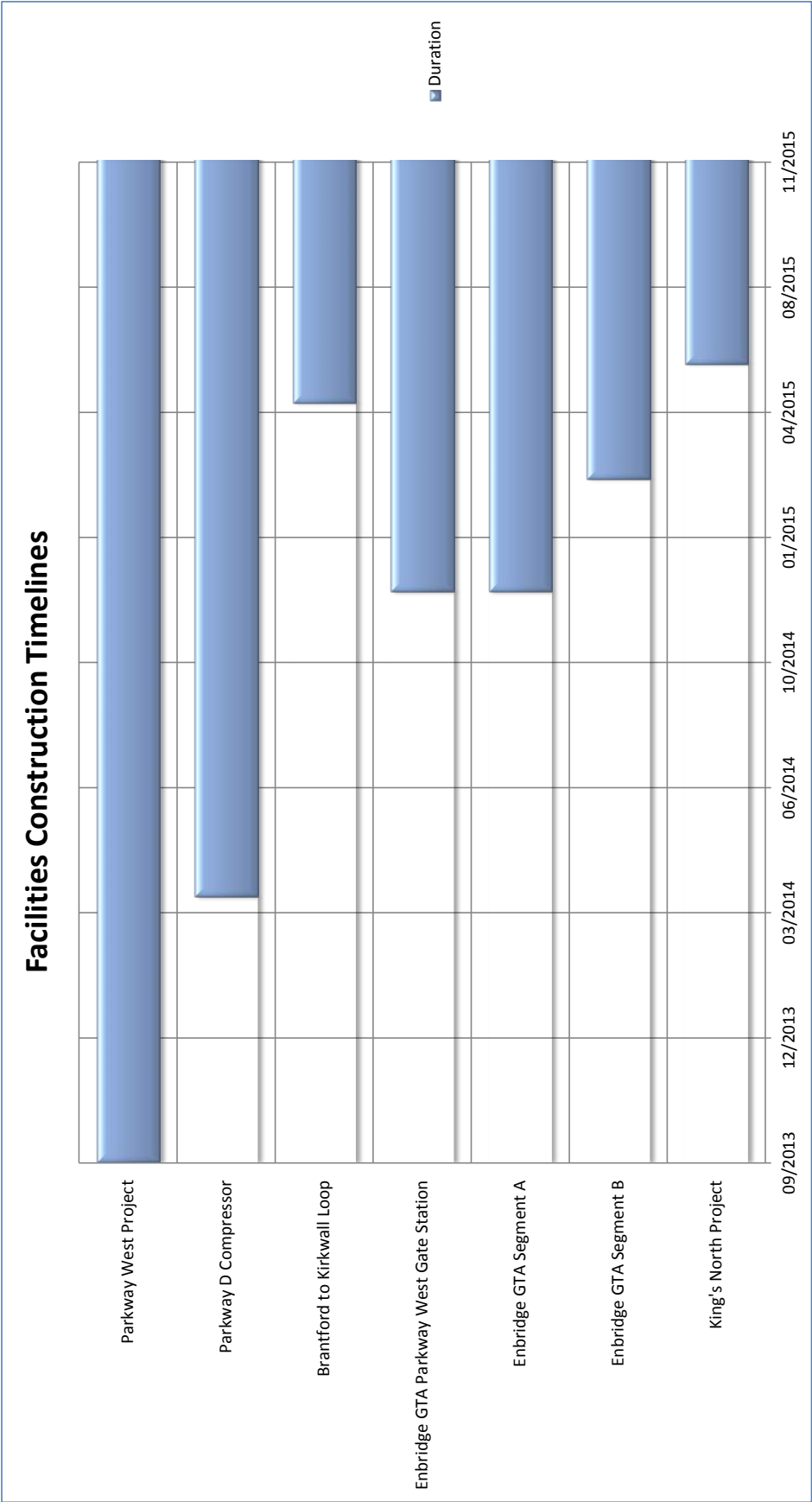
1- Parkway West Project is comprised of an LCU compressor as well as new interconnection to Enbridge on the suction side that provides reliability and resilience for the Parkway (Consumers) and Lisgar Deliveries. This new interconnection requires the Enbridge Parkway West Gate Station to be constructed.

2- Brantford to Kirkwall Looping is required when considering the Enbridge volume from footnote 3, plus 370 TJ/day for Gaz Metro and Union. King's North Project is required to move the Gaz Metro and Union volumes downstream.

3- Incremental compression required to provide 400 TJ/day shift for Enbridge and 400 TJ/day new Enbridge capacity request. Suction side pressure can only meet less than 75% of required volumes. For further reference please see Exhibit I.A1.UGL.Staff.8 and Transcript Volume 6, September 26, 2013, page 41.

4- Segment B required to move the Segment A volumes to the eastern side of the franchise.

5- Segment A pressure and flow required in addition to Segment B in order to achieve full pressure reduction on older lines and to accomplish gas supply shift.



* This represents the start of in-field construction and does not include lead time required for engineering, procurement, permitting etc.

UNDERTAKING J9.7

UNDERTAKING

TR 9, page 139

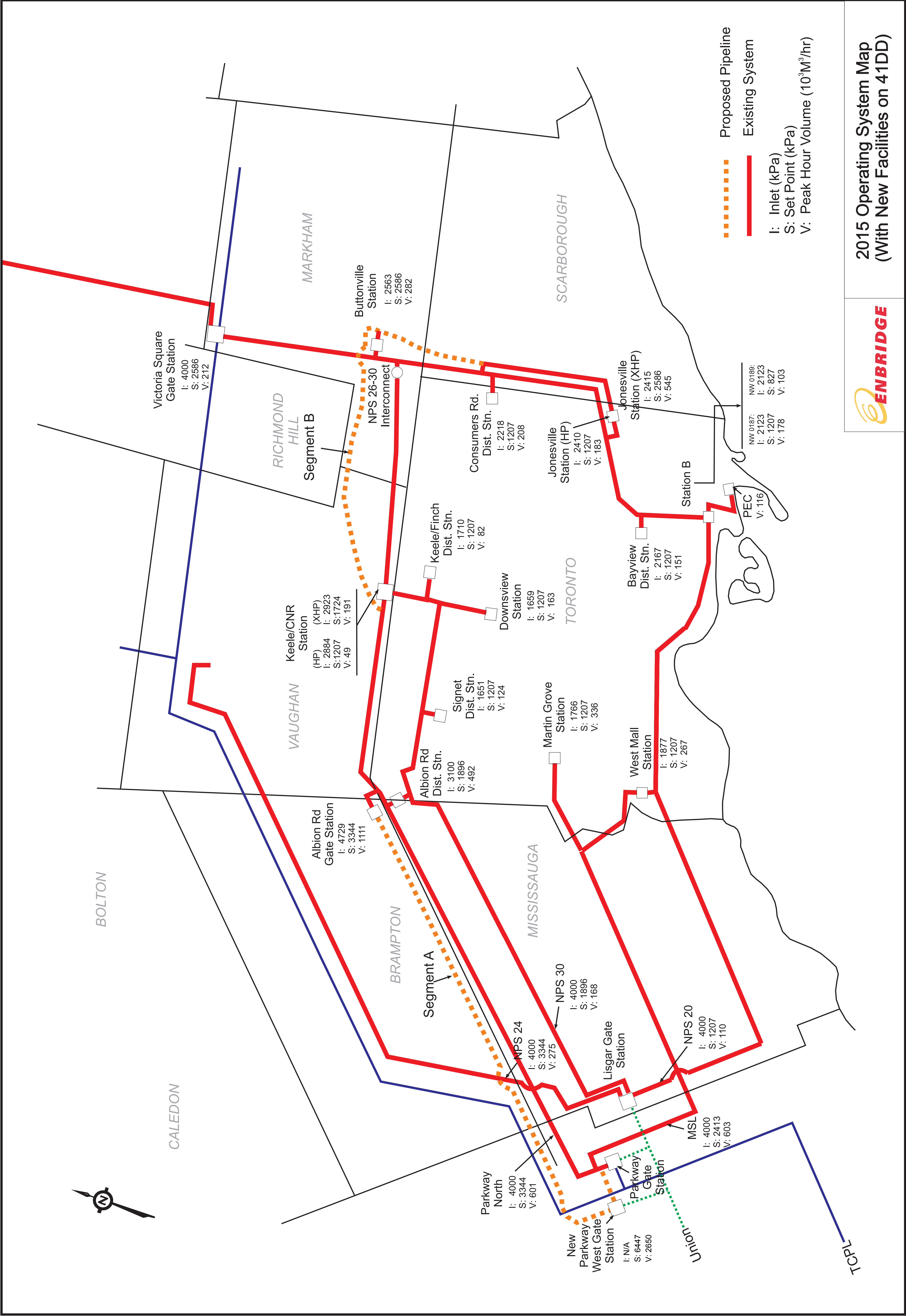
EGD to explain the change in I for Albion Road, and add I, S and V for the new Parkway West Gate Station.

RESPONSE

See Attachment 1 for updated map with Parkway West flows. The inlet pressure is not shown as it is dependent on upstream system hydraulics. The peak hour volume value is the approximate capacity of Segment A but would be dependent on contracts on the pipeline.

The reduced inlet pressure at Albion Gate Station (5909 kPa to 4707 kPa) was updated to reflect the new capacity of Segment A as being approximately 2000 TJ/day (as opposed to being used only for distribution). Nothing else was updated as the change to NPS42 and the additional Segment A capacity has no impact downstream of Albion Gate Station.

Witness: E. Naczynski



2015 Operating System Map
(With New Facilities on 41DD)

UNDERTAKING J9.8

UNDERTAKING

TR 9, page 151

To populate the chart at K9.2 with data from Exhibit A, Tab 3, Schedule 9, Attachment 1, Table A5.

RESPONSE

Please see the attachment for the populated chart.

Witness: A. Kacicnik

Item No.	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13
	Energy Probe Summary												
Rate Class Allocation	Base Average Rate cents/m3	Parkway West LCU M12/C1 Rate Inc. \$Million/yr	PW Station Lease \$Million/yr	Brantford-Pkwy & CD M12/C1 Rate Increase \$Million/yr	Segment A Rev Requirement \$Million	EDA Trans Charge \$Million/yr	Segment B Revenue Req't \$Million	TOTAL \$ Increase \$Million	Total % Increase %	Segment A Trans Revenue \$Million/yr	LH Transpn Cost Reducn (AS) \$Million/yr	Net Total \$ (Total \$ plus LH Transpn Cost Reducn) Decrease \$Million	Total % Decrease %
1.	34.59	5.24	* see note below	1.60	7.12	1.51	16.28	31.76	2.1%	* see note below	(83.82)	(52.07)	-3.7%
2.	25.73	4.33		1.33	5.80	1.23	13.63	26.32	2.1%		(67.61)	(41.29)	-5.4%
3.	29.40	0.00		0.00	0.00	0.00	0.00	0.00	0.6%		(0.04)	(0.04)	-6.5%
4.	0.00	0.00		0.00	0.00	0.00	0.00	0.00	1.4%		0.00	0.00	-8.9%
5.	20.05	0.09		0.03	0.17	0.04	0.58	0.90	1.4%		(2.62)	(1.72)	-8.9%
6.	18.90	0.03		0.01	0.03	0.01	0.45	0.53	1.2%		(0.23)	0.30	-9.8%
7.	18.53	0.00		0.00	0.02	0.00	0.01	0.03	0.7%		(0.43)	(0.40)	-10.6%
8.	19.63	0.04		0.01	0.06	0.01	0.12	0.24	1.3%		(0.89)	(0.64)	-9.4%
9.	17.41	0.07		0.02	0.10	0.02	0.10	0.32	1.0%		(1.46)	(1.15)	-11.0%
10.	20.67	0.11		0.03	0.18	0.04	0.38	0.74	2.3%		(2.49)	(1.75)	-7.4%
11.	9.10	0.00		0.00	0.00	0.00	2.55	2.55	23.5%		0.00	2.55	23.5%
12.	24.98	0.00		0.00	0.00	0.00	0.01	0.01	8.6%		0.00	0.01	8.6%
13.	TOTAL			3.03	13.48	2.86	34.11	63.40		(17.36)	(159.58)	(96.19)	

Notes:

- Col. 1. Average Sales Service Unit Rate from April 1, 2013 QRAM in cent/m3.
Col. 2. Impact of Parkway West LCU on existing and planned incremental Union Contracts Reference: Exhibit J6.11.
Col. 3. The estimated annual lease cost is included in Col. 5. The estimated lease cost will be provided to those that signed the Declaration and Undertaking.
Col. 4. Impact of Brantford-Parkway on existing and planned incremental Union Contracts.
Col. 5. Segment A Revenue Requirement to be recovered from EGD ratepayers. This includes 40% of the shared pipeline that will be used for distribution purposes.
Col. 6. Segment A Revenue Requirement to be recovered from EGD ratepayers for transportation service provided to the EDA.
Col. 7. Other GTA Project Revenue Requirement to be recovered from EGD ratepayers. This column includes Segment B and non-shared Segment A assets (i.e. stations, etc., not pipeline) that will be used for distribution purposes.
Col. 8. Sum of Columns 2 to 7.
Col. 9. Total impact relative to April 1, 2013 QRAM rates. The impacts are higher than those depicted in Exhibit A, Tab 3, Schedule 9 due to the inclusion of the impact of existing and planned incremental contracts of Union's Parkway West and Brantford projects, Col. 2 and Col. 3 respectively, and the impact of costs in Col. 6.
Col. 10. The impacts included in Exhibit A, Tab 3, Schedule 9, page 15 reflected costs from Col. 5 and Col. 7 only.
Col. 11. Revenue from Shippers on Rate 332 will serve as an offset to revenue requirement. Revenue of \$17.4 million and \$2.9 million (col. 6) = \$20.3 million.
Col. 12. Represents 10 year average of gas cost savings based on TCPL Compliance tolls. Reference J6.X, Page 3, Average Empress - Dawn basis = \$0.51/GJ @ 100 LF (\$109M +\$49 M = \$159M).
Col. 13. Total Cost from Column 8 less Gas Cost Savings from Column 11.
Net impact of projects costs and gas cost savings relative to April 1, 2013 QRAM rates.

UNDERTAKING J9.9

UNDERTAKING

TR 9, page 159

EGD to update sensitivity analysis with 25 per cent PI.

RESPONSE

For clarity, this request is a sensitivity scenario assuming total capital costs for the GTA project upfront capital¹ exceeds the forecasted costs by 25%. The original sensitivity table has been replicated and the additional scenario has been appended as Column #8 in the table below.

Note, Column #7 was a scenario with a 10% increase in capital costs for all capital amounts in the economic feasibility, including capital amounts such as Future Reinforcements, Service and Capital Maintenance costs. As described in Exhibit E, Tab 1, Schedule 1, the Company is not seeking approval for these costs with this application. It has incorporated these costs into the analysis for completeness since these customers will be supported by the proposed GTA Project.

¹ Upfront capital for the GTA Project is the capital and IDC required for the facilities being proposed in the application, but does not include escalation in order to be consistent with EBO 134 and EBO 188 guidelines.

Witnesses: C. Fernandes
S. Murray

Economic Sensitivity Results

Column #	1	2	3	4	5	6	7	8
Document Type:	Undertaking	Evidence	Evidence	Evidence	Evidence	Evidence	Evidence	Undertaking
Scenario Description:	Previous Base Case	Current Base Case	Current Base Case with 75% Transportation Savings	Current Base Case with 50% Transportation Savings	Current Base Case with 0% Transportation Services Charges	Current Base Case with No Customer Additions	Current Base Case with 10% Increase in Capital Cost	Current Base Case with 25% Increase in GTA Project Capital Cost only
Filed Date:	36" Shared with TransCanada 6/18/2013	42"	7/22/2013	42"	7/22/2013	42"	7/22/2013	42"
Reference:	Ex. JT2.16, Pg 2	Ex. E, Tab 4, Sch. 1	Update No.6 Ex.A, Tab 3, Sch.9	Update No.6 Ex.A, Tab 3, Sch.9	Update No.6 Ex.A, Tab 3, Sch.9	Update No.6 Ex.A, Tab 3, Sch.9	Update No.6 Ex.A, Tab 3, Sch.9	J9.9

Capital Investment

Total Upfront Capital	\$554,575,341	\$652,144,124	\$652,144,124	\$652,144,124	\$652,144,124	\$652,144,124	\$717,358,537	\$815,180,155
Future Reinforcement Projects								
2017	\$21,000,000	\$21,000,000	\$21,000,000	\$21,000,000	\$21,000,000	\$0	\$23,100,000	\$21,000,000
2018	\$16,400,000	\$16,400,000	\$16,400,000	\$16,400,000	\$16,400,000	\$0	\$18,040,000	\$16,400,000
2019	\$13,000,000	\$13,000,000	\$13,000,000	\$13,000,000	\$13,000,000	\$0	\$14,300,000	\$13,000,000
2020	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$0	\$275,000	\$250,000
Capital Maintenance Costs¹	\$5,218,238	\$5,230,240	\$5,230,240	\$5,230,240	\$5,230,240	\$5,230,240	\$5,753,264	\$5,230,240
Services²	\$379,533,696	\$379,533,696	\$379,533,696	\$379,533,696	\$379,533,696	\$0	\$417,487,066	\$379,533,696
Total Capital	\$989,977,275	\$1,087,558,060	\$1,087,558,060	\$1,087,558,060	\$1,087,558,060	\$657,374,364	\$1,196,313,866	\$1,250,594,091
Total Transportation Savings³	\$1,465,078,594	\$1,732,650,739	\$866,325,369	\$866,325,369	\$1,732,650,739	\$1,732,650,739	\$1,732,650,739	\$1,732,650,739
Total Transportation Services Charge^{1,4}	\$277,595,905	\$471,256,624	\$471,256,624	\$471,256,624	\$0	\$471,256,624	\$517,377,889	\$585,800,320
Total Distribution Revenues¹	\$4,546,724,222	\$4,546,724,222	\$4,546,724,222	\$4,546,724,222	\$4,546,724,222	\$0	\$4,546,724,222	\$4,546,724,222
Total Customer Additions (2015 - 2024)	146,337	146,337	146,337	146,337	146,337	-	146,337	146,337
Total Volumes (10³ m³)	24,709,032	24,709,032	24,709,032	24,709,032	24,709,032	-	24,709,032	24,709,032
SUMMARY OF RESULTS								
Net Present Value (40 years)	\$551,186,248	\$667,432,377	\$453,688,742	\$239,945,108	\$509,342,599	\$449,816,391	\$600,770,866	\$569,868,798
Variance to Current Base Case NPV (40 years)			(\$213,743,634)	(\$427,487,268)	(\$158,089,778)	(\$217,615,985)	(\$66,661,511)	(\$97,563,578)
Profitability Index (40 years)	1.67	1.73	1.50	1.26	1.56	1.75	1.60	1.54

NOTES:

- ¹Total for the 40-year horizon of analysis.
- ²Services include the costs for distribution mains, services and meters based on the 2013 capital budget.
- ³Total transportation savings, considered from 2015 to 2025 only, are equal to expected gas supply benefits and incorporate the total cost of landing gas in the Enbridge franchise area including costs associated with tolls, fuel and commodity procurement (i.e. basis differentials).
- Prepared with TransCanada tolls based on the NEB's Toll Order TG-006-2013 (issued June 11, 2013) which made TransCanada's Compliance Filing tolls final and effective July 1, 2013
- ⁴Transportation Services Charges to be received from contracted shippers for transportation from Parkway West to Albion. (Current Base Case)

Witnesses: C. Fernandes
S. Murray

UNDERTAKING J6.X

UNDERTAKING

On Hearing Day 2 (September 13, 2013)¹ and Hearing Day 3 (September 16, 2013)², the Joint Panel committed to provide an indicative impact of the Settlement Term Sheet with TransCanada. On Hearing Day 4 (September 17, 2013)³, Union committed to provide the impact through Undertaking J4.5 and Enbridge committed to respond to the same request on Hearing Day 6 (September 26, 2013)⁴, however no separate undertaking number was assigned. The following response is provided on behalf of Enbridge.

RESPONSE

This response provides an indicative impact of the Settlement Term Sheet with TransCanada. Impacts of the Settlement Term Sheet include an increase in transportation costs as a result of higher TransCanada tolls and a decrease in transportation costs as a result of access to short haul transport to the Enbridge EDA, made possible as a result of the settlement.

The estimated range of toll impacts provided by TransCanada is a 45% to 55% increase in short haul tolls and a 13% to 20% increase in long haul tolls to the Enbridge Franchise.

Based on the range of toll impacts provided by TransCanada the impact on tolls for transportation service utilized by Enbridge are as follows:

¹ Refer to Hearing Day 2 (September 13, 2013) transcript at page 120, line 28 to page 121, line 7.

² Refer to Hearing Day 3 (September 16, 2013) transcript at page 127, lines 4 to 16.

³ Refer to Hearing Day 4 (September 17, 2013) transcript at page 54, line 22 to page 55, line 21.

⁴ Refer to Hearing Day 6 (September 26, 2013) transcript at page 63, lines 10 to 17.

Witnesses: J. Denomy
M. Giridhar

\$/GJ	Compliance Filing Toll	13% Increase in Long Haul & 45% Increase in Short Haul	20% Increase in Long Haul & 55% Increase in Short Haul
Empress to Enbridge CDA	1.57	1.77	1.88
Empress to Enbridge EDA	1.62	1.83	1.94
Dawn to Enbridge CDA	0.24	0.34	0.37
Dawn to Enbridge EDA	0.44	0.63	0.68
Dawn to Iroquois	0.42	0.61	0.65
Parkway to Enbridge CDA	0.12	0.18	0.19
STS to Enbridge CDA	0.12	0.18	0.19
STS to Enbridge EDA	0.32	0.47	0.50
Parkway to Enbridge CDA SN	0.13	0.19	0.20

The annual increase in gas costs from the range of tolls provided above relative to the compliance tolls and using the October 2013 QRAM gas supply portfolio is shown below and ranges from \$50M to \$68M. The bridging contribution accounts for approximately 1/3rd of the impact on gas costs with the remaining impact accounting for cost recovery of the Eastern Ontario Triangle.

\$ Millions	Total TCPL Transportation Costs October 2013 QRAM	13% Increase in Long Haul Tolls, 45% Increase in Short Haul Tolls	20% Increase in Long Haul Tolls, 55% Increase in Short Haul Tolls
	234.7	284.1	302.3
Difference Relative to October 2013 QRAM		49.5	67.7

The average annual decrease in gas supply costs resulting from the ability to displace 170,000 GJ/d of long haul transport to the Enbridge EDA with short haul transport in 2016 is estimated to be approximately \$49 million per year. This expected benefit was calculated using TCPL Compliance Filing Tolls, an average Empress to Dawn basis differential of \$0.51 /GJ and 100% utilization of long haul capacity.

/u

The table below shows the annual average expected gas supply benefits for Enbridge's ratepayers arising from the GTA Project over the 2015 to 2025 timeframe for a range of basis and utilization scenarios.

Witnesses: J. Denomy
M. Giridhar

Annual Average GTA Project Benefits Calculations for Current Base Case - Basis and Utilization Scenarios @ Compliance Filing Tolls - 2015-2025				
\$ Millions		Average Empress- Dawn Basis = 0.51 \$/GJ	Average Empress- Dawn Basis = 0.92 \$/GJ	Average Empress- Dawn Basis = 1.50 \$/GJ
Enbridge CDA				
Long Haul Load Factor = 100% (January to December)	System Gas	109	62	(2)
	Direct Purchase	64	39	5
	Total	173	101	3
Long Haul Load Factor = 42% (November to March)	System Gas	138	119	92
	Direct Purchase	64	39	5
	Total	202	158	96
Long Haul Load Factor = 25% (December to February)	System Gas	145	134	118
	Direct Purchase	64	39	5
	Total	210	173	122
Enbridge EDA				
Long Haul Load Factor = 100% (January to December)	System Gas	49	21	(15)
Long Haul Load Factor = 42% (November to March)	System Gas	65	53	38
Long Haul Load Factor = 25% (December to February)	System Gas	69	62	53
Grand Total				
Long Haul Load Factor = 100% (January to December)		222	122	(12)
Long Haul Load Factor = 42% (November to March)		267	211	134
Long Haul Load Factor = 25% (December to February)		279	235	175

Enbridge has not updated the benefits resulting from the GTA Project using the range of indicative tolls provided by TransCanada. While the unit increase in long haul tolls underpinning this range is higher than the unit increase in short haul tolls, these increases are based on a six year surcharge recovery for long haul vs. a fifteen year surcharge recovery for short haul. Over the term of the settlement the differential in tolls is expected to be approximately the same as the differential in compliance tolls.

The combined benefits of the GTA Project and the term sheet are substantial and far exceed the increase in short haul and long haul tolls resulting from the term sheet under all but the scenario where Enbridge uses all its contracts at a 100% load factor and the basis differential between Alberta and Dawn is \$1.50 or more.

As noted in evidence, 100% utilization is an unrealistic assumption given that Enbridge operates its distribution system at approximately 30% utilization factor. In addition, Enbridge has not included upstream arrangements necessary to meet growth in peak demand. The absence of short haul supply will result in ever decreasing utilization of long haul transport increments resulting in a transfer of wealth from Enbridge rate payers to other shippers on the TransCanada system. Enbridge has or is in the process of firming up approximately 360 TJ/d of long haul transport in lieu of previously contracted STFT for 2014. Enbridge would note that while the determination of final Mainline tolls were based on an average throughput from Alberta they did not explicitly incorporate firming up of Enbridge's 2013 peak day demand or growth in Enbridge's peak day demand over time.

/u

Witnesses: J. Denomy
M. Giridhar

Finally, the basis differentials reflected in the table do not reflect changes in Marcellus basis relative to Alberta. Enbridge notes that at TGP Zone 4 Marcellus, a trading point in the Marcellus formation, gas is currently trading at approximately \$2.00 /GJ, a discount of \$0.55 relative to AECO in Alberta. Enbridge's analysis has assumed that Marcellus basis would trade above Alberta basis.

Witnesses: J. Denomy
M. Giridhar

UNDERTAKING J6.10

UNDERTAKING

TR 6, page 123

EGD to provide summary schedule of breakdown on Segment A of peak requirements for distribution and transmission from 2015-16 to 2019-20 by year.

RESPONSE

The table below provides a breakdown of peak day requirements for distribution and transmission for the 2015/2016 gas year through to and including the 2019/2020 gas year.

GJ/d	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Enbridge Distribution Requirement - CDA	800,000	800,000	800,000	800,000	800,000
Enbridge Transmission Requirement - EDA	0	170,000	170,000	170,000	170,000
Transmission Requirement – Enbridge Segment A Open Season	385,283	769,769	769,769	769,769	769,769
Total	1,355,283	1,739,769	1,739,769	1,739,769	1,739,769
Incremental Requirement Pursuant to TCPL Open Season	Unknown	Unknown	Unknown	Unknown	Unknown

/u

Witnesses: J. Denomy
M. Giridhar
E. Naczynski

Enbridge would note that as per the Settlement Term Sheet TransCanada will be conducting an open season to determine additional requirements for the Parkway to Maple path. Depending on the response to this open season there could be additional transmission requirements over and above the requirement indicated in the response to Enbridge's open season for Segment A.

Witnesses: J. Denomy
M. Giridhar
E. Naczynski