

Attachment – Gas Supply Benefits Calculations and Assumptions

Table A1: Toll Assumptions

<u>Toll Assumptions</u>	<u>Demand Toll (\$/GJ)</u>	<u>Commodity Toll (\$/GJ)</u>
FT Empress-EGD CDA ¹	1.677	0.000
Dawn-EGD CDA ¹	0.252	0.000
Peaking 1 ²	0.682	Iroquois + \$0.00
Peaking 2 ²	0.731	Iroquois + \$0.19
Peaking 3 ²	0.926	Dawn + CDA Transport + \$0.24
M12 Dawn-Parkway ³	0.091	0.000
Niagara-Parkway Enbridge CDA ⁴	0.164	0.000
Union Parkway Belt-Bram West CDA ⁴	0.093	0.000

¹ 2013-2017 Review and Variance tolls as provided by TransCanada on May 1, 2013 in NEB Hearing Order RH-003-2011.

² Pricing based on peaking RFP responses for 12'-13' winter service.

³ Toll provided in EB-2013-0074 Union Gas Brantford-Kirkwall/Parkway D Project application.

⁴ 2013-2017 Review and Variance tolls as provided by TransCanada based on costs and billing determinants provided in the Review and Variance Application filed on May 1, 2013.

Table A2: Fuel Ratio Assumptions

Fuel Ratio Assumptions (%)	January	February	March	April	May	June	July	August	September	October	November	December
Empress-EGD CDA ¹	4.500	5.050	5.000	2.800	1.350	1.000	0.950	1.350	1.100	1.650	2.400	3.500
Dawn-EGD CDA ¹	0.590	0.510	0.760	0.400	0.240	0.000	0.150	0.180	0.020	0.090	0.360	0.360
M12 Dawn-Parkway ²	1.086	1.033	0.972	0.802	0.567	0.463	0.451	0.355	0.352	0.697	0.840	0.945
Niagara-Parkway Enbridge CDA ³	0.420	0.310	0.550	0.300	0.160	0.000	0.120	0.130	0.000	0.030	0.280	0.220
Union Parkway Belt-Bram West CDA ⁴	0.250	0.150	0.250	0.180	0.100	0.000	0.070	0.080	0.000	0.000	0.120	0.110

¹ Actual fuel ratios from June 2012 to May 2013.

² Fuel ratios per M12 rate schedule effective April 1, 2013. Dawn to Parkway (TCPL).

³ Actual fuel ratios from June 2012 to May 2013. Assumes Niagara to EGD CDA fuel ratios.

⁴ Actual fuel ratios from June 2012 to May 2013. Assumes Union Parkway Belt to EGD CDA fuel ratios.

Table A3: Commodity Price Assumptions

<u>Commodity Price Assumptions - Annual Average (\$/GJ)</u> ¹	<u>Empress</u>	<u>Dawn</u>	<u>Niagara</u>	<u>Iroquois</u>	<u>EGD/CDA</u>
2015	3.69	4.40	4.30	5.51	4.65
2016	3.85	4.44	4.40	5.62	4.70
2017	4.02	4.57	4.55	5.77	4.83
2018	4.42	4.75	4.72	5.95	5.00
2019	4.47	4.94	5.01	6.00	5.20
2020	4.52	5.03	5.08	6.05	5.28
2021	4.56	5.07	5.12	6.09	5.32
2022	4.60	5.10	5.16	6.12	5.36
2023	4.64	5.15	5.20	6.17	5.40
2024	4.68	5.15	5.24	6.21	5.40
2025	4.72	5.19	5.28	6.24	5.44

¹Commodity prices based on forward curves from OpenLink as at May 6, 2013.

Table A4: GTA Project Benefits Calculations (\$ millions)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Increased Firm Transportation Scenario											
Service Path											
TCPL FT - EGD	30.1	180.8	180.3	180.3	180.3	180.8	180.3	180.3	180.3	180.8	180.3
Empress-EGD CDA	2.1	10.8	11.2	12.3	12.4	12.6	12.7	12.8	12.9	13.1	13.1
Commodity Cost	69.2	415.3	432.5	474.9	480.6	487.2	490.3	480.6	491.1	504.8	507.1
Total Cost	101.4	606.9	624.0	667.5	673.3	680.6	683.2	687.4	692.3	698.6	700.5
Service Path											
Peaking Supplies -EGD	0.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Empress-EGD CDA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commodity Cost	0.0	6.2	6.4	6.5	6.2	6.3	6.4	6.4	6.4	6.5	6.5
Total Cost	0.1	7.2	7.3	7.5	7.2	7.3	7.3	7.4	7.4	7.4	7.5
Service Path											
TCPL FT - Direct Purchase	16.8	100.8	100.5	100.5	100.5	100.5	100.5	100.5	100.5	100.8	100.5
Empress-EGD CDA, Dawn-EGD CDA	1.1	6.0	6.2	6.8	6.9	7.0	7.0	7.1	7.1	7.2	7.3
Commodity Cost	48.6	291.2	302.2	327.6	333.7	338.7	340.8	343.5	346.7	350.0	351.6
Total Cost	66.5	397.9	408.9	434.9	441.1	446.5	448.3	451.1	454.3	458.0	459.3
A-Total Cost	168.0	1,012.0	1,040.3	1,109.9	1,121.6	1,134.4	1,138.8	1,145.9	1,154.0	1,164.1	1,167.3
Expected Contracting With GTA Project Facilities Approved											
Service Path											
Union M12 - EGD	1.1	6.7	6.6	6.6	6.6	6.7	6.6	6.6	6.6	6.7	6.6
Dawn-Parkway	0.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Commodity Cost	25.8	158.6	162.8	168.9	176.0	179.4	180.3	181.6	183.2	183.8	184.5
Total Cost	27.2	166.4	170.7	176.8	183.9	187.4	188.3	189.6	191.1	191.8	192.5
Service Path											
TCPL FT - EGD	2.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Niagara Falls-Enbridge Parkway CDA	0.1	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Commodity Cost	53.5	321.9	331.8	344.6	365.6	372.2	374.1	376.7	379.9	383.8	385.3
Total Cost	55.6	334.6	344.5	357.3	378.4	385.0	386.8	389.5	392.6	396.6	398.1
Service Path											
Union M12 - Direct Purchase	1.1	6.7	6.6	6.6	6.6	6.7	6.6	6.6	6.6	6.7	6.6
Dawn-Parkway	0.5	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7
Commodity Cost	54.7	325.3	333.9	346.5	360.9	368.0	369.9	372.6	375.7	377.1	378.5
Total Cost	56.3	334.3	343.0	355.7	370.2	377.3	379.2	381.9	385.1	386.4	387.9
Service Path											
TCPL FT - EGD & Direct Purchase	4.5	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2	27.2
Parkway to Bram West CDA	0.1	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Commodity Cost	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Cost	4.6	27.8	27.7	27.7	27.8	27.8	27.8	27.8	27.8	27.9	27.8
B-Total Cost	143.7	863.1	885.8	917.5	960.2	977.5	988.1	988.8	996.6	1,002.7	1,006.2
Savings (A-B)	24.3	148.9	154.5	192.3	161.4	156.9	156.7	157.1	157.4	161.4	161.1