Attachment to EGDI-TCPL 1.1(g) – Updated Landed Cost Analysis

July 2017 - Summary of Landed Cost Analysis ($C/GJ)

Pipeline	Path	Pricing Point	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Average
TCPL/Union	Niagara-to-Kirkwall-to-Dawn	Niagara	3.19	2.96	2.94	2.98	3.00	3.06	3.14	3.23	3.34	3.46	3.57	3.69	3.82	3.97	4.11	4.26	4.42	3.48
Dawn	Dawn Spot Purchases	Dawn	3.47	3.24	3.21	3.26	3.28	3.48	3.56	3.65	3.76	3.64	3.76	3.88	4.01	4.15	4.30	4.45	4.61	3.75
TCPL - LTFP	Empress-to-Union SWDA	Empress	3.42	3.29	3.28	3.33	3.36	3.40	3.48	3.57	3.69	3.81	3.93	4.05	4.18	4.33	4.48	4.63	4.79	3.83
Vector	Chicago-to-Dawn	Chicago	3.72	3.49	3.50	3.55	3.60	3.65	3.72	3.82	3.93	4.05	4.17	4.29	4.43	4.57	4.73	4.88	5.03	4.07
NEXUS (-15%)	Dominion South-to-Milford Junction-to-Dawn	Dominion South	3.97	3.74	3.63	3.65	3.71	3.76	3.83	3.93	4.04	4.16	4.28	4.41	4.55	4.70	4.85	5.00	5.16	4.20
Rover	Dominion South-to-Dawn	Dominion South	4.00	3.77	3.67	3.68	3.74	3.79	3.86	3.96	4.07	4.19	4.31	4.43	4.57	4.72	4.87	5.02	5.18	4.22
NEXUS (Anchor)	Dominion South-to-Milford Junction-to-Dawn	Dominion South	4.07	3.84	3.73	3.75	3.81	3.85	3.93	4.03	4.14	4.26	4.38	4.51	4.65	4.80	4.95	5.10	5.26	4.30
NEXUS (Base)	Dominion South-to-Milford Junction-to-Dawn	Dominion South	4.09	3.86	3.75	3.76	3.82	3.87	3.95	4.04	4.16	4.28	4.40	4.52	4.67	4.81	4.97	5.12	5.28	4.32
NEXUS (+15%)	Dominion South-to-Milford Junction-to-Dawn	Dominion South	4.20	3.98	3.87	3.88	3.94	3.99	4.07	4.16	4.28	4.40	4.52	4.64	4.78	4.93	5.09	5.24	5.40	4.43
Alliance	Alliance Trading-to-Border-to-Chicago-to-Dawn	Alliance Trading	4.26	4.07	4.08	4.13	4.16	4.21	4.29	4.39	4.51	4.63	4.76	4.89	5.03	5.19	5.35	5.50	5.67	4.65
TCPL	Empress-to-Union SWDA	Empress	4.48	4.35	4.34	4.39	4.42	4.46	4.54	4.63	4.75	4.87	4.99	5.11	5.24	5.39	5.54	5.69	5.85	4.89
ANR East	Leesville-to-Dawn	Dominion South	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Average Commodity Prices ($C/GJ)

Pricing Point	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Average
Alliance Trading	2.52	2.34	2.36	2.40	2.43	2.48	2.55	2.64	2.75	2.87	2.98	3.10	3.23	3.37	3.52	3.66	3.81	2.88
Chicago	3.38	3.16	3.16	3.21	3.26	3.31	3.38	3.47	3.58	3.70	3.82	3.94	4.07	4.22	4.37	4.51	4.67	3.72
Dawn	3.47	3.24	3.21	3.26	3.28	3.48	3.56	3.65	3.76	3.64	3.76	3.88	4.01	4.15	4.30	4.45	4.61	3.75
Dominion South	2.97	2.76	2.65	2.67	2.72	2.77	2.84	2.94	3.05	3.16	3.28	3.40	3.53	3.67	3.82	3.97	4.12	3.20
Empress	2.55	2.42	2.42	2.46	2.49	2.53	2.60	2.70	2.81	2.92	3.04	3.15	3.28	3.42	3.57	3.72	3.87	2.94
Niagara	2.80	2.57	2.54	2.59	2.61	2.67	2.74	2.84	2.95	3.06	3.18	3.30	3.43	3.57	3.72	3.86	4.02	3.08

Average Foreign Exchange Rate

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Average
C$/US$	1.267	1.264	1.261	1.260	1.259	1.258	1.258	1.259	1.261	1.264	1.268	1.271	1.276	1.281	1.286	1.289	1.291	1.269

Average Demand Charge (C$/GJ)

Pipeline	Path	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Average
Alliance	Alliance Trading-to-Border	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597
Alliance	Border-to-Chicago	0.634	0.633	0.631	0.631	0.631	0.630	0.630	0.631	0.631	0.633	0.635	0.637	0.639	0.642	0.644	0.645	0.647	0.635
NEXUS (Base)	Dominion South-to-Milford Junction	0.840	0.838	0.837	0.836	0.835	0.835	0.835	0.835	0.837	0.839	0.841	0.843	0.847	0.850	0.853	0.855	0.857	0.842
NEXUS (Base)	Milford Junction-to-Dawn	0.192	0.192	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.192	0.192	0.193	0.194	0.194	0.195	0.195	0.196	0.192
NEXUS (Anchor)	Dominion South-to-Milford Junction	0.822	0.820	0.819	0.818	0.818	0.817	0.817	0.817	0.819	0.821	0.823	0.825	0.829	0.832	0.835	0.837	0.838	0.824
NEXUS (Anchor)	Milford Junction-to-Dawn	0.192	0.192	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.192	0.192	0.193	0.194	0.194	0.195	0.195	0.196	0.192
NEXUS (+15%)	Dominion South-to-Milford Junction	0.957	0.955	0.953	0.952	0.952	0.951	0.951	0.952	0.953	0.955	0.958	0.961	0.965	0.968	0.972	0.974	0.976	0.959
NEXUS (+15%)	Milford Junction-to-Dawn	0.192	0.192	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.192	0.192	0.193	0.194	0.194	0.195	0.195	0.196	0.192
NEXUS (-15)	Dominion South-to-Milford Junction	0.723	0.722	0.720	0.719	0.719	0.719	0.719	0.719	0.720	0.722	0.724	0.726	0.729	0.732	0.734	0.736	0.737	0.725
NEXUS (-15%)	Milford Junction-to-Dawn	0.192	0.192	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.192	0.192	0.193	0.194	0.194	0.195	0.195	0.196	0.192
Rover	Dominion South-to-Dawn	0.960	0.958	0.956	0.955	0.955	0.954	0.954	0.955	0.956	0.958	0.961	0.964	0.968	0.971	0.975	0.977	0.979	0.962
TCPL	LH Empress-to-Union SWDA	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654	1.654
TCPL	LTFP Empress-to-Union SWDA	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770	0.770
TCPL	Niagara-to-Kirkwall	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221
UNION (M12X)	Kirkwall-to-Dawn	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139
Vector	Chicago-to-St. Clair	0.288	0.287	0.287	0.286	0.286	0.286	0.286	0.286	0.287	0.287	0.288	0.289	0.290	0.292	0.293	0.293	0.294	0.289
Vector	St. Clair-to-Dawn	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019

Average Abendonment/ACA Charge (C$/GJ)

Pipeline	Path	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Average
Alliance	Alliance Trading-to-Border	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
NEXUS	Dominion South-to-Milford Junction	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Rover	Dominion South-to-Dawn	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
TCPL	Empress-to-Union SWDA	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176	0.176
TCPL	Niagara-to-Kirkwall	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Vector	Chicago-to-St. Clair	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Vector	St. Clair-to-Dawn	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.000

Average Fuel Ratio

Pipeline	Path	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	Average
Alliance	Alliance Trading-to-Border	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%	4.75%
Alliance	Border-to-Chicago	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%	1.33%
NEXUS (Base)	Dominion South-to-Milford Junction	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (Base)	Milford Junction-to-Dawn	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%
NEXUS (Anchor)	Dominion South-to-Milford Junction	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (Anchor)	Milford Junction-to-Dawn	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%
NEXUS (+15%)	Dominion South-to-Milford Junction	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (+15%)	Milford Junction-to-Dawn	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%
NEXUS (-15)	Dominion South-to-Milford Junction	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
NEXUS (-15%)	Milford Junction-to-Dawn	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%	0.46%
Rover	Dominion South-to-Dawn	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%
TCPL	Empress-to-Union SWDA	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%
TCPL	Niagara-to-Kirkwall	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%
UNION (M12X)	Kirkwall-to-Dawn	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%
Vector	Chicago-to-St. Clair	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%	1.05%