

DSM Analysis
Economic Summary Tables
Plan 4 K19/Gas40/250MW (Hypothetical) Level 2 DSM
at 5.40% and 4.65% Discount Rate

Note:

The DSM economic analysis summaries for Plan 4 with Level 2 DSM as shown in Exhibits 104-15-3, 104-16-3, using 5.40% and 4.65% discount rates.

Note:

Plan 4 is considered hypothetical from a business perspective as a 250 MW interconnection would require renegotiation of a contract with Minnesota Power which would not be expected to result in the same level of benefits given that the entire economic analysis is now in the public forum. MP has taken the position in its Certificate of Need filing on October 21, 2013 (Section 7.4.2.1 page 77) that “such a project would not meet the long-term needs of the region and would not prove to be cost-effective for customers or environmentally preferable over the long-term.” The 250MW interconnection is not likely to be approved by US authorities and proceed.

TABLE 043
ECONOMIC SUMMARY
DSM ANALYSIS - TOTAL RESOURCE COST

Energy Price
Discount Rate
Capital Cost
Reference
Reference
Reference

FYB	Capital and Related Costs (Millions of 2014\$)										Net Average Flow Related Revenue (Millions of 2014\$)				
	Conawapa	Keyask	Thermal	Wind	Transmission		DSM	Total	Capital	Fixed	Gross	Water	Thermal	Power	Net
	GS	GS	GS	GS	GOT	US T/L	Capital	Capital	Taxes	O&M					
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	381.63	0.00	0.00	11.53	3.96	114.77	511.89	2.34	0.91	0.00	0.00	0.00	0.00	0.00
2015	0.00	658.21	0.00	0.00	9.05	2.71	130.11	800.09	6.07	0.91	344.68	101.54	24.36	100.67	118.12
2016	0.00	727.13	0.00	0.00	16.18	3.95	276.12	1023.37	10.41	0.91	396.44	99.52	25.90	106.05	164.97
2017	0.00	891.26	0.00	0.00	29.74	5.92	164.07	1090.98	15.45	0.91	447.14	97.66	27.34	110.53	211.61
2018	0.00	510.88	0.00	0.00	42.34	17.76	163.97	734.96	18.67	0.91	468.10	95.01	29.73	114.08	229.29
2043	0.00	258.44	0.00	0.00	39.84	17.76	138.26	454.31	20.53	17.46	501.29	94.67	28.62	113.19	264.81
2020	0.00	136.74	0.00	0.00	0.01	18.42	105.47	260.64	21.54	17.59	713.58	102.85	22.21	108.25	480.26
2021	0.00	59.23	0.00	0.00	0.00	0.00	84.63	143.86	22.01	17.24	780.50	103.32	21.95	112.71	542.52
2022	0.00	0.00	0.00	0.00	0.00	0.00	112.01	112.01	22.19	17.45	783.38	101.40	22.76	115.79	543.43
2023	0.00	0.00	0.00	0.00	0.00	0.00	111.42	111.42	22.37	17.28	782.20	99.60	22.59	118.94	541.07
2024	0.00	0.00	0.00	0.00	0.00	0.00	112.17	112.17	22.56	17.14	766.83	97.28	24.51	122.31	522.73
2025	0.00	0.00	0.00	0.00	0.00	0.00	102.81	102.81	22.73	16.94	703.06	95.25	22.14	117.05	468.62
2026	0.00	0.00	0.00	0.00	0.00	0.00	103.33	103.33	22.90	16.54	709.33	94.23	23.38	118.77	472.95
2027	0.00	0.00	0.00	0.00	0.00	0.00	103.29	103.29	23.07	16.58	676.15	92.22	22.08	117.00	444.85
2028	0.00	0.00	0.00	0.00	0.00	0.00	96.90	96.90	23.13	16.65	664.64	90.54	23.67	119.62	430.82
2029	0.00	0.00	0.00	0.00	0.00	0.00	97.86	97.86	23.18	19.34	651.61	88.86	24.50	122.61	415.65
2030	0.00	0.00	0.00	0.00	0.00	0.00	99.52	99.52	23.24	15.42	637.24	87.76	22.40	118.09	408.99
2031	0.00	0.00	0.00	0.00	0.00	0.00	101.91	101.91	23.29	15.42	629.11	86.31	22.97	119.95	399.88
2032	0.00	0.00	0.00	0.00	0.00	0.00	100.49	100.49	23.34	15.42	608.87	84.74	22.81	119.34	381.99
2033	0.00	0.00	0.00	0.00	0.00	0.00	106.87	106.87	23.39	15.42	593.68	83.16	23.33	121.51	365.67
2034	0.00	0.00	0.00	0.00	0.00	0.00	112.27	112.27	23.45	15.42	577.95	81.60	23.78	123.89	348.67
2035	0.00	0.00	0.00	0.00	0.00	0.00	115.73	115.73	23.50	14.76	547.12	80.09	23.94	119.11	323.98
2036	0.00	0.00	0.00	0.00	0.00	0.00	163.61	163.61	23.56	14.76	520.46	78.62	24.44	117.90	299.50
2037	0.00	0.00	0.00	0.00	0.00	0.00	119.46	119.46	23.59	14.76	501.78	77.18	24.76	120.99	278.85
2038	0.00	0.00	77.51	0.00	0.00	0.00	115.80	193.32	23.98	14.76	481.02	75.76	24.82	123.27	257.16
2039	0.00	0.00	105.87	0.00	9.06	0.00	129.60	244.53	24.56	17.65	477.74	75.42	19.17	128.95	254.20
2040	0.00	0.00	16.06	0.00	0.00	0.00	121.13	137.19	24.65	18.74	452.45	73.30	32.66	135.65	210.84
2043	0.00	0.00	0.00	0.00	0.00	0.00	115.04	115.04	24.65	18.74	429.33	71.48	38.37	143.29	176.19
2042	0.00	0.00	79.08	0.00	0.00	0.00	115.56	194.63	25.06	18.74	413.55	70.07	42.85	148.66	151.97
2043	0.00	0.00	108.00	0.00	9.06	0.00	82.54	199.60	25.65	18.74	416.22	69.74	40.46	150.08	155.94
2044	0.00	0.00	16.38	0.00	0.00	0.00	68.39	84.77	25.74	24.45	393.59	67.84	59.13	157.66	108.97
2045	0.00	0.00	80.27	0.00	0.00	0.00	61.97	142.23	26.14	24.45	377.49	66.55	64.60	164.24	82.10
2046	0.00	0.00	109.63	0.00	71.35	0.00	59.69	240.67	27.05	24.45	377.88	65.96	67.41	168.61	75.90
2047	0.00	0.00	16.63	0.00	0.00	0.00	58.37	75.00	27.14	27.57	370.96	64.74	87.24	173.80	45.17
2048	0.00	0.00	0.00	0.00	0.00	0.00	57.98	57.98	27.15	26.71	343.08	63.00	103.51	181.43	-4.87
2049	0.00	0.00	0.00	0.00	1.09	0.16	53.54	54.79	27.15	29.59	363.97	64.57	86.05	174.61	38.74
2050	0.00	0.00	0.00	0.00	0.43	0.33	52.19	52.95	27.15	26.71	363.97	64.57	86.05	174.61	38.74
2051	0.00	0.00	0.00	0.00	15.00	0.98	51.77	67.74	27.15	26.71	363.97	64.57	86.05	174.61	38.74
2052	0.00	0.00	0.00	0.00	18.71	1.46	51.66	71.83	27.15	26.72	363.97	64.57	86.05	174.61	38.74
2053	0.00	0.00	0.00	0.00	19.59	4.39	52.86	76.85	27.15	26.72	363.97	64.57	86.05	174.61	38.74
2054	0.00	0.00	0.00	0.00	16.72	4.39	60.15	81.26	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2055	0.00	0.00	0.00	0.00	0.00	4.55	64.82	69.37	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2056	0.00	0.00	0.00	0.00	0.00	0.00	109.82	109.82	27.15	42.18	363.97	64.57	86.05	174.61	38.74
2057	0.00	0.00	0.00	0.00	0.00	0.00	72.99	72.99	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2058	0.00	0.00	0.00	0.00	0.00	0.00	82.51	82.51	27.15	42.18	363.97	64.57	86.05	174.61	38.74
2059	0.00	0.00	0.00	0.00	0.00	0.00	81.65	81.65	27.15	29.62	363.97	64.57	86.05	174.61	38.74
2060	0.00	0.00	0.00	0.00	0.00	0.00	73.50	73.50	27.15	42.18	363.97	64.57	86.05	174.61	38.74
2061	0.00	0.00	0.00	0.00	0.00	0.00	64.57	64.57	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2062	0.00	0.00	0.00	0.00	3.06	0.00	55.37	58.43	27.15	42.18	363.97	64.57	86.05	174.61	38.74
2063	0.00	0.00	0.00	0.00	0.72	0.00	57.17	57.89	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2064	0.00	0.00	0.00	0.00	18.79	0.50	58.61	77.89	27.15	42.18	363.97	64.57	86.05	174.61	38.74
2065	0.00	0.00	0.00	0.00	8.63	0.99	68.42	78.03	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2066	0.00	0.00	0.00	0.00	1.18	2.97	70.75	74.91	27.15	42.18	363.97	64.57	86.05	174.61	38.74
2067	0.00	0.00	0.00	0.00	11.03	4.46	69.48	84.96	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2068	0.00	0.00	77.51	0.00	22.75	13.38	68.62	182.26	27.15	42.18	363.97	64.57	86.05	174.61	38.74
2069	0.00	0.00	105.87	0.00	23.12	13.38	68.45	210.82	27.15	29.62	363.97	64.57	86.05	174.61	38.74
2070	0.00	0.00	16.06	0.00	0.01	13.87	51.70	81.64	27.15	28.46	363.97	64.57	86.05	174.61	38.74
2071	0.00	0.00	0.00	0.00	0.00	0.00	51.87	51.87	27.15	28.46	363.97	64.57	86.05	174.61	38.74
2072	0.00	0.00	79.08	0.00	0.00	0.00	57.46	136.54	27.15	28.46	363.97	64.57	86.05	174.61	38.74
2073	0.00	0.00	108.00	0.00	0.00	0.00	78.04	186.04	27.15	27.60	363.97	64.57	86.05	174.61	38.74
2074	0.00	0.00	16.38	0.00	9.06	0.00	91.03	116.47	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2075	0.00	0.00	80.27	0.00	0.00	0.00	98.08	178.35	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2076	0.00	0.00	109.63	0.00	0.00	0.00	139.30	248.93	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2077	0.00	0.00	16.63	0.00	0.00	0.00	101.54	118.17	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2078	0.00	0.00	0.00	0.00	9.06	0.00	94.48	103.54	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2079	0.00	0.00	0.00	0.00	0.00	0.00	84.86	84.86	27.15	29.62	363.97	64.57	86.05	174.61	38.74
2080	0.00	0.00	0.00	0.00	0.00	0.00	74.09	74.09	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2081	0.00	0.00	0.00	0.00	53.51	0.00	66.49	120.01	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2082	0.00	0.00	0.00	0.00	0.00	0.00	65.63	65.63	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2083	0.00	0.00	0.00	0.00	0.00	0.00	64.05	64.05	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2084	0.00	0.00	0.00	0.00	1.09	0.16	63.57	64.82	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2085	0.00	0.00	0.00	0.00	0.43	0.33	54.79	55.55	27.15	26.73	363.97	64.57	86.05	174.61	38.74
2086	0.00	0.00													

TABLE 044
ECONOMIC SUMMARY
DSM ANALYSIS - MANITOBA HYDRO VIEW

Energy Price
Discount Rate
Capital Cost
Reference
Reference
Reference

FYB	Capital and Related Costs (Millions of 2014\$)										Net Average Flow Related Revenue (Millions of 2014\$)				
	Conawapa GS	Keyask GS	Thermal GS	Wind GS	Transmission		DSM Capital	Total Capital	Capital Taxes	Fixed O&M	Gross Revenue	Water Rental	Thermal Burn	Power Purchases	Net Revenue
					GOT	US T/L									
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	381.63	0.00	0.00	11.53	3.96	61.07	458.19	2.34	0.91	-20.25	0.00	0.00	0.00	-20.25
2015	0.00	658.21	0.00	0.00	9.05	2.71	66.45	736.43	6.07	0.91	310.66	101.54	24.36	100.67	84.09
2016	0.00	727.13	0.00	0.00	16.18	3.95	109.93	857.18	10.41	0.91	337.35	99.52	25.90	106.05	105.88
2017	0.00	891.26	0.00	0.00	29.74	5.92	71.38	998.30	15.45	0.91	373.02	97.66	27.34	110.53	137.49
2018	0.00	510.88	0.00	0.00	42.34	17.76	73.09	644.07	18.67	0.91	374.40	95.01	29.73	114.08	135.58
2043	0.00	258.44	0.00	0.00	39.84	17.76	57.30	373.34	20.53	17.46	397.17	94.67	28.62	113.19	160.69
2020	0.00	136.74	0.00	0.00	0.01	18.42	45.17	200.33	21.54	17.59	601.79	102.85	22.21	108.25	368.47
2021	0.00	59.23	0.00	0.00	0.00	0.00	35.91	95.14	22.01	17.24	662.95	103.32	21.95	112.71	424.97
2022	0.00	0.00	0.00	0.00	0.00	0.00	35.77	35.77	22.19	17.45	658.79	101.40	22.76	115.79	418.84
2023	0.00	0.00	0.00	0.00	0.00	0.00	36.21	36.21	22.37	17.28	653.15	99.60	22.59	118.94	412.02
2024	0.00	0.00	0.00	0.00	0.00	0.00	36.83	36.83	22.56	17.14	632.79	97.28	24.51	122.31	388.69
2025	0.00	0.00	0.00	0.00	0.00	0.00	35.65	35.65	22.73	16.94	564.30	95.25	22.14	117.05	329.86
2026	0.00	0.00	0.00	0.00	0.00	0.00	33.98	33.98	22.90	16.54	565.28	94.23	23.38	118.77	328.91
2027	0.00	0.00	0.00	0.00	0.00	0.00	33.92	33.92	23.07	16.58	530.02	92.22	22.08	117.00	298.72
2028	0.00	0.00	0.00	0.00	0.00	0.00	11.79	11.79	23.13	16.65	515.11	90.54	23.67	119.62	281.28
2029	0.00	0.00	0.00	0.00	0.00	0.00	10.34	10.34	23.18	19.34	498.81	88.86	24.50	122.61	262.85
2030	0.00	0.00	0.00	0.00	0.00	0.00	10.37	10.37	23.24	15.42	481.18	87.76	22.40	118.09	252.93
2031	0.00	0.00	0.00	0.00	0.00	0.00	10.45	10.45	23.29	15.42	469.87	86.31	22.97	119.95	240.64
2032	0.00	0.00	0.00	0.00	0.00	0.00	10.53	10.53	23.34	15.42	446.55	84.74	22.81	119.34	219.67
2033	0.00	0.00	0.00	0.00	0.00	0.00	10.60	10.60	23.39	15.42	428.37	83.16	23.33	121.51	200.37
2034	0.00	0.00	0.00	0.00	0.00	0.00	10.68	10.68	23.45	15.42	409.64	81.60	23.78	123.89	180.36
2035	0.00	0.00	0.00	0.00	0.00	0.00	10.76	10.76	23.50	14.76	375.75	80.09	23.94	119.11	152.62
2036	0.00	0.00	0.00	0.00	0.00	0.00	10.84	10.84	23.56	14.76	346.02	78.62	24.44	117.90	125.06
2037	0.00	0.00	0.00	0.00	0.00	0.00	6.37	6.37	23.59	14.76	324.93	77.18	24.76	120.99	102.00
2038	0.00	0.00	77.51	0.00	0.00	0.00	1.40	78.91	23.98	14.76	301.74	75.76	24.82	123.27	77.89
2039	0.00	0.00	105.87	0.00	9.06	0.00	1.19	116.12	24.56	17.65	296.95	75.42	19.17	128.95	73.40
2040	0.00	0.00	16.06	0.00	0.00	0.00	1.19	17.25	24.65	18.74	270.13	73.30	32.66	135.65	28.52
2043	0.00	0.00	0.00	0.00	0.00	0.00	1.19	1.19	24.65	18.74	245.49	71.48	38.37	143.29	-7.64
2042	0.00	0.00	79.08	0.00	0.00	0.00	1.19	80.27	25.06	18.74	228.29	70.07	42.85	148.66	-33.29
2043	0.00	0.00	108.00	0.00	9.06	0.00	1.19	118.25	25.65	18.74	230.96	69.74	40.46	150.08	-29.33
2044	0.00	0.00	16.38	0.00	0.00	0.00	1.19	17.58	25.74	24.45	208.33	67.84	59.13	157.66	-76.29
2045	0.00	0.00	80.27	0.00	0.00	0.00	1.19	81.46	26.14	24.45	192.23	66.55	64.60	164.24	-103.16
2046	0.00	0.00	109.63	0.00	71.35	0.00	1.19	182.17	27.05	24.45	192.62	65.96	67.41	168.61	-109.36
2047	0.00	0.00	16.63	0.00	0.00	0.00	1.19	17.82	27.14	27.57	185.69	64.74	87.24	173.80	-140.09
2048	0.00	0.00	0.00	0.00	0.00	0.00	1.19	1.19	27.15	26.71	157.82	63.00	103.51	181.43	-190.13
2049	0.00	0.00	0.00	0.00	1.09	0.16	0.99	2.24	27.15	29.59	178.71	64.57	86.05	174.61	-146.53
2050	0.00	0.00	0.00	0.00	0.43	0.33	0.99	1.74	27.15	26.71	178.71	64.57	86.05	174.61	-146.53
2051	0.00	0.00	0.00	0.00	15.00	0.98	0.99	16.96	27.15	26.71	178.71	64.57	86.05	174.61	-146.53
2052	0.00	0.00	0.00	0.00	18.71	1.46	0.99	21.16	27.15	26.72	178.71	64.57	86.05	174.61	-146.53
2053	0.00	0.00	0.00	0.00	19.59	4.39	0.99	24.97	27.15	26.72	178.71	64.57	86.05	174.61	-146.53
2054	0.00	0.00	0.00	0.00	16.72	4.39	0.99	22.10	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2055	0.00	0.00	0.00	0.00	0.00	4.55	0.99	5.54	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2056	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.99	27.15	42.18	178.71	64.57	86.05	174.61	-146.53
2057	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.99	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2058	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.99	27.15	42.18	178.71	64.57	86.05	174.61	-146.53
2059	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	27.15	29.62	178.71	64.57	86.05	174.61	-146.53
2060	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	27.15	42.18	178.71	64.57	86.05	174.61	-146.53
2061	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2062	0.00	0.00	0.00	0.00	3.06	0.00	0.79	3.85	27.15	42.18	178.71	64.57	86.05	174.61	-146.53
2063	0.00	0.00	0.00	0.00	0.72	0.00	0.79	1.50	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2064	0.00	0.00	0.00	0.00	18.79	0.50	0.79	20.07	27.15	42.18	178.71	64.57	86.05	174.61	-146.53
2065	0.00	0.00	0.00	0.00	8.63	0.99	0.79	10.40	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2066	0.00	0.00	0.00	0.00	1.18	2.97	0.79	4.94	27.15	42.18	178.71	64.57	86.05	174.61	-146.53
2067	0.00	0.00	0.00	0.00	11.03	4.46	0.79	16.27	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2068	0.00	0.00	77.51	0.00	22.75	13.38	0.79	114.42	27.15	42.18	178.71	64.57	86.05	174.61	-146.53
2069	0.00	0.00	105.87	0.00	23.12	13.38	0.58	142.94	27.15	29.62	178.71	64.57	86.05	174.61	-146.53
2070	0.00	0.00	16.06	0.00	0.01	13.87	0.58	30.52	27.15	28.46	178.71	64.57	86.05	174.61	-146.53
2071	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	28.46	178.71	64.57	86.05	174.61	-146.53
2072	0.00	0.00	79.08	0.00	0.00	0.00	0.58	79.66	27.15	28.46	178.71	64.57	86.05	174.61	-146.53
2073	0.00	0.00	108.00	0.00	0.00	0.00	0.58	108.58	27.15	27.60	178.71	64.57	86.05	174.61	-146.53
2074	0.00	0.00	16.38	0.00	9.06	0.00	0.58	26.03	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2075	0.00	0.00	80.27	0.00	0.00	0.00	0.58	80.85	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2076	0.00	0.00	109.63	0.00	0.00	0.00	0.58	110.21	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2077	0.00	0.00	16.63	0.00	0.00	0.00	0.58	17.21	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2078	0.00	0.00	0.00	0.00	9.06	0.00	0.58	9.64	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2079	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	29.62	178.71	64.57	86.05	174.61	-146.53
2080	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2081	0.00	0.00	0.00	0.00	53.51	0.00	0.58	54.09	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2082	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2083	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2084	0.00	0.00	0.00	0.00	1.09	0.16	0.58	1.83	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2085	0.00	0.00	0.00	0.00	0.43	0.33	0.58	1.34	27.15	26.73	178.71	64.57	86.05	174.61	-146.53
2086	0.00	0.00	0.00	0.00	15.00	0.98	0.58	16.56	27.15	26.73	178.71	64.57	86.05	174.	

TABLE 043B
ECONOMIC SUMMARY
DSM ANALYSIS - TOTAL RESOURCE COST

Energy Price
Discount Rate
Capital Cost
Reference
4.65%
Reference

FYB	Capital and Related Costs (Millions of 2014\$)										Net Average Flow Related Revenue (Millions of 2014\$)				
	Conawapa GS	Keyask GS	Thermal GS	Wind GS	Transmission		DSM Capital	Total Capital	Capital Taxes	Fixed O&M	Gross Revenue	Water Rental	Thermal Burn	Power Purchases	Net Revenue
					GOT	US T/L									
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	381.69	0.00	0.00	11.53	3.96	114.79	511.96	2.34	0.91	0.00	0.00	0.00	0.00	0.00
2015	0.00	658.31	0.00	0.00	9.06	2.71	130.13	800.20	6.07	0.91	344.73	101.56	24.36	100.68	118.13
2016	0.00	727.23	0.00	0.00	16.18	3.95	276.16	1023.52	10.41	0.91	396.50	99.54	25.90	106.07	165.00
2017	0.00	891.38	0.00	0.00	29.74	5.92	164.09	1091.13	15.45	0.91	447.21	97.67	27.35	110.54	211.64
2018	0.00	510.95	0.00	0.00	42.34	17.77	164.00	735.06	18.67	0.91	468.17	95.02	29.73	114.09	229.32
2043	0.00	258.48	0.00	0.00	39.84	17.77	138.28	454.37	20.54	17.46	501.36	94.68	28.62	113.21	264.85
2020	0.00	136.75	0.00	0.00	0.01	18.42	105.49	260.67	21.54	17.59	713.68	102.86	22.22	108.27	480.33
2021	0.00	59.24	0.00	0.00	0.00	0.00	84.64	143.88	22.01	17.24	780.61	103.33	21.95	112.73	542.59
2022	0.00	0.00	0.00	0.00	0.00	0.00	112.02	112.02	22.19	17.45	783.49	101.42	22.77	115.81	543.50
2023	0.00	0.00	0.00	0.00	0.00	0.00	111.43	111.43	22.37	17.28	782.31	99.61	22.59	118.96	541.15
2024	0.00	0.00	0.00	0.00	0.00	0.00	112.19	112.19	22.56	17.14	766.94	97.29	24.51	122.33	522.80
2025	0.00	0.00	0.00	0.00	0.00	0.00	102.83	102.83	22.74	16.94	703.16	95.26	22.15	117.06	468.69
2026	0.00	0.00	0.00	0.00	0.00	0.00	103.35	103.35	22.91	16.55	709.43	94.24	23.38	118.79	473.02
2027	0.00	0.00	0.00	0.00	0.00	0.00	103.31	103.31	23.08	16.59	676.24	92.23	22.08	117.01	444.91
2028	0.00	0.00	0.00	0.00	0.00	0.00	96.92	96.92	23.14	16.65	664.74	90.55	23.68	119.63	430.88
2029	0.00	0.00	0.00	0.00	0.00	0.00	97.87	97.87	23.19	19.34	651.70	88.87	24.50	122.62	415.71
2030	0.00	0.00	0.00	0.00	0.00	0.00	99.54	99.54	23.24	15.42	637.33	87.78	22.40	118.10	409.05
2031	0.00	0.00	0.00	0.00	0.00	0.00	101.93	101.93	23.29	15.42	629.20	86.32	22.97	119.97	399.94
2032	0.00	0.00	0.00	0.00	0.00	0.00	100.51	100.51	23.34	15.42	608.96	84.75	22.81	119.36	382.05
2033	0.00	0.00	0.00	0.00	0.00	0.00	106.89	106.89	23.40	15.42	593.76	83.18	23.33	121.53	365.72
2034	0.00	0.00	0.00	0.00	0.00	0.00	112.28	112.28	23.45	15.42	578.03	81.62	23.79	123.91	348.72
2035	0.00	0.00	0.00	0.00	0.00	0.00	115.74	115.74	23.50	14.76	547.19	80.11	23.94	119.12	324.02
2036	0.00	0.00	0.00	0.00	0.00	0.00	163.63	163.63	23.56	14.76	520.53	78.63	24.44	117.92	299.54
2037	0.00	0.00	0.00	0.00	0.00	0.00	119.48	119.48	23.59	14.76	501.85	77.19	24.77	121.01	278.89
2038	0.00	0.00	77.53	0.00	0.00	0.00	115.82	193.34	23.99	14.76	481.08	75.77	24.83	123.29	257.20
2039	0.00	0.00	105.88	0.00	9.06	0.00	129.62	244.56	24.57	17.65	477.81	75.43	19.18	128.97	254.23
2040	0.00	0.00	16.06	0.00	0.00	0.00	121.15	137.21	24.65	18.74	452.51	73.31	32.66	135.67	210.87
2043	0.00	0.00	0.00	0.00	0.00	0.00	115.05	115.05	24.66	18.74	429.39	71.49	38.37	143.31	176.22
2042	0.00	0.00	79.09	0.00	0.00	0.00	115.57	194.66	25.06	18.74	413.61	70.08	42.85	148.68	151.99
2043	0.00	0.00	108.02	0.00	9.06	0.00	82.55	199.62	25.65	18.74	416.28	69.75	40.47	150.10	155.96
2044	0.00	0.00	16.39	0.00	0.00	0.00	68.40	84.78	25.74	24.45	393.64	67.84	59.13	157.68	108.98
2045	0.00	0.00	80.28	0.00	0.00	0.00	61.98	142.25	26.15	24.45	377.55	66.56	64.61	164.26	82.12
2046	0.00	0.00	109.64	0.00	71.36	0.00	59.70	240.71	27.06	24.45	377.93	65.97	67.42	168.64	75.91
2047	0.00	0.00	16.63	0.00	0.00	0.00	58.38	75.01	27.15	27.58	371.01	64.75	87.26	173.82	45.18
2048	0.00	0.00	0.00	0.00	0.00	0.00	57.99	57.99	27.15	26.71	343.13	63.01	103.53	181.46	-4.87
2049	0.00	0.00	0.00	0.00	1.09	0.16	53.55	54.80	27.15	29.60	364.02	64.58	86.07	174.64	38.74
2050	0.00	0.00	0.00	0.00	0.43	0.33	52.20	52.96	27.15	26.71	364.02	64.58	86.07	174.64	38.74
2051	0.00	0.00	0.00	0.00	15.00	0.98	51.77	67.75	27.15	26.72	364.02	64.58	86.07	174.64	38.74
2052	0.00	0.00	0.00	0.00	18.71	1.46	51.66	71.84	27.15	26.72	364.02	64.58	86.07	174.64	38.74
2053	0.00	0.00	0.00	0.00	19.60	4.39	52.87	76.86	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2054	0.00	0.00	0.00	0.00	16.72	4.39	60.16	81.27	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2055	0.00	0.00	0.00	0.00	0.00	4.55	64.83	69.38	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2056	0.00	0.00	0.00	0.00	0.00	0.00	109.83	109.83	27.15	42.18	364.02	64.58	86.07	174.64	38.74
2057	0.00	0.00	0.00	0.00	0.00	0.00	73.00	73.00	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2058	0.00	0.00	0.00	0.00	0.00	0.00	82.53	82.53	27.15	42.18	364.02	64.58	86.07	174.64	38.74
2059	0.00	0.00	0.00	0.00	0.00	0.00	81.67	81.67	27.15	29.62	364.02	64.58	86.07	174.64	38.74
2060	0.00	0.00	0.00	0.00	0.00	0.00	73.51	73.51	27.15	42.18	364.02	64.58	86.07	174.64	38.74
2061	0.00	0.00	0.00	0.00	0.00	0.00	64.58	64.58	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2062	0.00	0.00	0.00	0.00	3.06	0.00	55.38	58.44	27.15	42.18	364.02	64.58	86.07	174.64	38.74
2063	0.00	0.00	0.00	0.00	0.72	0.00	57.18	57.90	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2064	0.00	0.00	0.00	0.00	18.79	0.50	58.61	77.90	27.15	42.18	364.02	64.58	86.07	174.64	38.74
2065	0.00	0.00	0.00	0.00	8.63	0.99	68.43	78.04	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2066	0.00	0.00	0.00	0.00	1.18	2.97	70.76	74.92	27.15	42.18	364.02	64.58	86.07	174.64	38.74
2067	0.00	0.00	0.00	0.00	11.03	4.46	69.49	84.98	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2068	0.00	0.00	77.53	0.00	22.75	13.38	68.63	182.28	27.15	42.18	364.02	64.58	86.07	174.64	38.74
2069	0.00	0.00	105.88	0.00	23.12	13.38	68.46	210.85	27.15	29.62	364.02	64.58	86.07	174.64	38.74
2070	0.00	0.00	16.06	0.00	0.01	13.87	51.71	81.65	27.15	28.47	364.02	64.58	86.07	174.64	38.74
2071	0.00	0.00	0.00	0.00	0.00	0.00	51.88	51.88	27.15	28.47	364.02	64.58	86.07	174.64	38.74
2072	0.00	0.00	79.09	0.00	0.00	0.00	57.47	136.56	27.15	28.47	364.02	64.58	86.07	174.64	38.74
2073	0.00	0.00	108.02	0.00	0.00	0.00	78.05	186.06	27.15	27.60	364.02	64.58	86.07	174.64	38.74
2074	0.00	0.00	16.39	0.00	9.06	0.00	91.04	116.49	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2075	0.00	0.00	80.28	0.00	0.00	0.00	98.09	178.37	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2076	0.00	0.00	109.64	0.00	0.00	0.00	139.32	248.96	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2077	0.00	0.00	16.63	0.00	0.00	0.00	101.55	118.18	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2078	0.00	0.00	0.00	0.00	9.06	0.00	94.50	103.56	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2079	0.00	0.00	0.00	0.00	0.00	0.00	84.87	84.87	27.15	29.62	364.02	64.58	86.07	174.64	38.74
2080	0.00	0.00	0.00	0.00	0.00	0.00	74.10	74.10	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2081	0.00	0.00	0.00	0.00	53.52	0.00	66.50	120.02	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2082	0.00	0.00	0.00	0.00	0.00	0.00	65.64	65.64	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2083	0.00	0.00	0.00	0.00	0.00	0.00	64.06	64.06	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2084	0.00	0.00	0.00	0.00	1.09	0.16	63.58	64.83	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2085	0.00	0.00	0.00	0.00	0.43	0.33	54.80	55.56	27.15	26.73	364.02	64.58	86.07	174.64	38.74
2086	0.00	0.00	0.00	0.00											

TABLE 044B
ECONOMIC SUMMARY
DSM ANALYSIS - MANITOBA HYDRO VIEW

Energy Price
Discount Rate
Capital Cost
Reference
4.65%
Reference

FYB	Capital and Related Costs (Millions of 2014\$)										Net Average Flow Related Revenue (Millions of 2014\$)				
	Conawapa GS	Keeyask GS	Thermal GS	Wind GS	Transmission		DSM Capital	Total Capital	Capital Taxes	Fixed O&M	Gross Revenue	Water Rental	Thermal Burn	Power Purchases	Net Revenue
					GOT	US T/L									
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	381.69	0.00	0.00	11.53	3.96	61.08	458.25	2.34	0.91	-20.26	0.00	0.00	0.00	-20.26
2015	0.00	658.31	0.00	0.00	9.06	2.71	66.46	736.53	6.07	0.91	310.70	101.56	24.36	100.68	84.10
2016	0.00	727.23	0.00	0.00	16.18	3.95	109.95	857.30	10.41	0.91	337.40	99.54	25.90	106.07	105.90
2017	0.00	891.38	0.00	0.00	29.74	5.92	71.39	998.44	15.45	0.91	373.07	97.67	27.35	110.54	137.51
2018	0.00	510.95	0.00	0.00	42.34	17.77	73.10	644.16	18.67	0.91	374.45	95.02	29.73	114.09	135.60
2043	0.00	258.48	0.00	0.00	39.84	17.77	57.30	373.39	20.54	17.46	397.23	94.68	28.62	113.21	160.71
2020	0.00	136.75	0.00	0.00	0.01	18.42	45.17	200.36	21.54	17.59	601.88	102.86	22.22	108.27	368.52
2021	0.00	59.24	0.00	0.00	0.00	0.00	35.91	95.15	22.01	17.24	663.04	103.33	21.95	112.73	425.03
2022	0.00	0.00	0.00	0.00	0.00	0.00	35.78	35.78	22.19	17.45	658.89	101.42	22.77	115.81	418.90
2023	0.00	0.00	0.00	0.00	0.00	0.00	36.22	36.22	22.37	17.28	653.24	99.61	22.59	118.96	412.08
2024	0.00	0.00	0.00	0.00	0.00	0.00	36.84	36.84	22.56	17.14	632.88	97.29	24.51	122.33	388.75
2025	0.00	0.00	0.00	0.00	0.00	0.00	35.65	35.65	22.74	16.94	564.38	95.26	22.15	117.06	329.90
2026	0.00	0.00	0.00	0.00	0.00	0.00	33.98	33.98	22.91	16.55	565.36	94.24	23.38	118.79	328.95
2027	0.00	0.00	0.00	0.00	0.00	0.00	33.93	33.93	23.08	16.59	530.10	92.23	22.08	117.01	298.77
2028	0.00	0.00	0.00	0.00	0.00	0.00	11.79	11.79	23.14	16.65	515.18	90.55	23.68	119.63	281.32
2029	0.00	0.00	0.00	0.00	0.00	0.00	10.34	10.34	23.19	19.34	498.88	88.87	24.50	122.62	262.89
2030	0.00	0.00	0.00	0.00	0.00	0.00	10.38	10.38	23.24	15.42	481.24	87.78	22.40	118.10	252.96
2031	0.00	0.00	0.00	0.00	0.00	0.00	10.45	10.45	23.29	15.42	469.94	86.32	22.97	119.97	240.68
2032	0.00	0.00	0.00	0.00	0.00	0.00	10.53	10.53	23.34	15.42	446.62	84.75	22.81	119.36	219.70
2033	0.00	0.00	0.00	0.00	0.00	0.00	10.61	10.61	23.40	15.42	428.43	83.18	23.33	121.53	200.40
2034	0.00	0.00	0.00	0.00	0.00	0.00	10.68	10.68	23.45	15.42	409.70	81.62	23.79	123.91	180.38
2035	0.00	0.00	0.00	0.00	0.00	0.00	10.76	10.76	23.50	14.76	375.81	80.11	23.94	119.12	152.64
2036	0.00	0.00	0.00	0.00	0.00	0.00	10.84	10.84	23.56	14.76	346.07	78.63	24.44	117.92	125.08
2037	0.00	0.00	0.00	0.00	0.00	0.00	6.37	6.37	23.59	14.76	324.98	77.19	24.77	121.01	102.01
2038	0.00	0.00	77.53	0.00	0.00	0.00	1.40	78.92	23.99	14.76	301.78	75.77	24.83	123.29	77.90
2039	0.00	0.00	105.88	0.00	9.06	0.00	1.19	116.14	24.57	17.65	296.99	75.43	19.18	128.97	73.41
2040	0.00	0.00	16.06	0.00	0.00	0.00	1.19	17.26	24.65	18.74	270.17	73.31	32.66	135.67	28.53
2043	0.00	0.00	0.00	0.00	0.00	0.00	1.19	1.19	24.66	18.74	245.53	71.49	38.37	143.31	-7.64
2042	0.00	0.00	79.09	0.00	0.00	0.00	1.19	80.28	25.06	18.74	228.32	70.08	42.85	148.68	-33.30
2043	0.00	0.00	108.02	0.00	9.06	0.00	1.19	118.27	25.65	18.74	230.99	69.75	40.47	150.10	-29.33
2044	0.00	0.00	16.39	0.00	0.00	0.00	1.19	17.58	25.74	24.45	208.35	67.84	59.13	157.68	-76.30
2045	0.00	0.00	80.28	0.00	0.00	0.00	1.19	81.47	26.15	24.45	192.26	66.56	64.61	164.26	-103.17
2046	0.00	0.00	109.64	0.00	71.36	0.00	1.19	182.20	27.06	24.45	192.65	65.97	67.42	168.64	-109.38
2047	0.00	0.00	16.63	0.00	0.00	0.00	1.19	17.83	27.15	27.58	185.72	64.75	87.26	173.82	-140.11
2048	0.00	0.00	0.00	0.00	0.00	0.00	1.19	1.19	27.15	26.71	157.84	63.01	103.53	181.46	-190.15
2049	0.00	0.00	0.00	0.00	1.09	0.16	0.99	2.24	27.15	29.60	178.74	64.58	86.07	174.64	-146.55
2050	0.00	0.00	0.00	0.00	0.43	0.33	0.99	1.74	27.15	26.71	178.74	64.58	86.07	174.64	-146.55
2051	0.00	0.00	0.00	0.00	15.00	0.98	0.99	16.97	27.15	26.72	178.74	64.58	86.07	174.64	-146.55
2052	0.00	0.00	0.00	0.00	18.71	1.46	0.99	21.16	27.15	26.72	178.74	64.58	86.07	174.64	-146.55
2053	0.00	0.00	0.00	0.00	19.60	4.39	0.99	24.97	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2054	0.00	0.00	0.00	0.00	16.72	4.39	0.99	22.10	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2055	0.00	0.00	0.00	0.00	0.00	4.55	0.99	5.54	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2056	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.99	27.15	42.18	178.74	64.58	86.07	174.64	-146.55
2057	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.99	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2058	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.99	27.15	42.18	178.74	64.58	86.07	174.64	-146.55
2059	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	27.15	29.62	178.74	64.58	86.07	174.64	-146.55
2060	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	27.15	42.18	178.74	64.58	86.07	174.64	-146.55
2061	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2062	0.00	0.00	0.00	0.00	3.06	0.00	0.79	3.85	27.15	42.18	178.74	64.58	86.07	174.64	-146.55
2063	0.00	0.00	0.00	0.00	0.72	0.00	0.79	1.50	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2064	0.00	0.00	0.00	0.00	18.79	0.50	0.79	20.08	27.15	42.18	178.74	64.58	86.07	174.64	-146.55
2065	0.00	0.00	0.00	0.00	8.63	0.99	0.79	10.40	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2066	0.00	0.00	0.00	0.00	1.18	2.97	0.79	4.94	27.15	42.18	178.74	64.58	86.07	174.64	-146.55
2067	0.00	0.00	0.00	0.00	11.03	4.46	0.79	16.28	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2068	0.00	0.00	77.53	0.00	22.75	13.38	0.79	114.44	27.15	42.18	178.74	64.58	86.07	174.64	-146.55
2069	0.00	0.00	105.88	0.00	23.12	13.38	0.58	142.96	27.15	29.62	178.74	64.58	86.07	174.64	-146.55
2070	0.00	0.00	16.06	0.00	0.01	13.87	0.58	30.53	27.15	28.47	178.74	64.58	86.07	174.64	-146.55
2071	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	28.47	178.74	64.58	86.07	174.64	-146.55
2072	0.00	0.00	79.09	0.00	0.00	0.00	0.58	79.67	27.15	28.47	178.74	64.58	86.07	174.64	-146.55
2073	0.00	0.00	108.02	0.00	0.00	0.00	0.58	108.60	27.15	27.60	178.74	64.58	86.07	174.64	-146.55
2074	0.00	0.00	16.39	0.00	9.06	0.00	0.58	26.03	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2075	0.00	0.00	80.28	0.00	0.00	0.00	0.58	80.86	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2076	0.00	0.00	109.64	0.00	0.00	0.00	0.58	110.23	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2077	0.00	0.00	16.63	0.00	0.00	0.00	0.58	17.21	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2078	0.00	0.00	0.00	0.00	9.06	0.00	0.58	9.64	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2079	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	29.62	178.74	64.58	86.07	174.64	-146.55
2080	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2081	0.00	0.00	0.00	0.00	53.52	0.00	0.58	54.10	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2082	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2083	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.58	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2084	0.00	0.00	0.00	0.00	1.09	0.16	0.58	1.83	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2085	0.00	0.00	0.00	0.00	0.43	0.33	0.58	1.34	27.15	26.73	178.74	64.58	86.07	174.64	-146.55
2086	0.00	0.00	0.00	0.00	15.00	0.98	0.58	16.56	27.15	26.73	178.74	64.58	86.07		