

**Morrison Park Advisors**  
**Calculation of Manitoba Hydro Debt Ratios (Electric Operations Only)**  
**Attachment to MPA Presentation to PUB - January 15, 2018 (Refer to pp. 17 - 18)**

**Manitoba Hydro Revised Version - Attachment to February 1, 2018 Presentation (Refer to pp. 4-6)**

Note: additions to MPA analysis (Exhibit CC-45-1) are in boldface and boxed  
 Electric Operations Debt Ratio Calculation (Source: PUB/MHI - 33)

Fiscal Year Ended	Retained Earnings	Retained Earnings Gas	Retained Earnings Subs	Adjustments and Eliminations	Retained Earnings	Unamortized Customer Contributions Consolidated	Unamortized Customer Contributions Gas	Unamortized Customer Contributions	Accumulated Other Comprehensive Income	Non-controlling Interest	Long-Term Debt	Sinking Fund Investment	Short-term Investments	Net Equity	Net Debt	Equity Ratio	Debt Ratio	Accounting Standard
2012	2450	34	26		2390	318	33	285	327	100	9084	372	42	3102	8670	26.4%	73.6%	CGAAP
2013	2542	42	32		2468	340	33	307	299	95	9690	352	24	3169	9314	25.4%	74.6%	CGAAP
2014	2716	62	39		2615	381	42	339	96	73	10563	111	131	3123	10321	23.2%	76.8%	CGAAP
2015	2779	66	48	6	2659	457	42	415	-720	120	12375	114	482	2474	11779	17.4%	82.6%	IFRS
2016	2828	65	57	10	2696	534	45	489	-776	140	14187	0	944	2549	13243	16.1%	83.9%	IFRS
2017	2899	69	69	12	2749	651	45	606	-709	170	16078	0	634	2816	15444	15.4%	84.6%	IFRS

Adjusted for IFRS impact on pension treatment in AOCI only (Source of pension amount included in AOCI: MIPUG/MH I - 2o: 2015 \$559 M; 2016 \$567 M; 2017 \$473 M)

Fiscal Year Ended	Retained Earnings	Retained Earnings Gas	Retained Earnings Subs	Adjustments and Eliminations	Retained Earnings	Unamortized Customer Contributions Consolidated	Unamortized Customer Contributions Gas	Unamortized Customer Contributions	Accumulated Other Comprehensive Income	Non-controlling Interest	Long-Term Debt	Sinking Fund Investment	Short-term Investments	Net Equity	Net Debt	Equity Ratio	Debt Ratio	Accounting Standard
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2013	2542	42	32		2468	340	33	307	299	95	9690	352	24	3169	9314	25.4%	74.6%	CGAAP
2014	2716	62	39		2615	381	42	339	96	73	10563	111	131	3123	10321	23.2%	76.8%	CGAAP
2015	2779	66	48	6	2659	457	42	415	-161	120	12375	114	482	3033	11779	20.5%	79.5%	Adjusted
2016	2828	65	57	10	2696	534	45	489	-209	140	14187	0	944	3116	13243	19.0%	81.0%	Adjusted
2017	2899	69	69	12	2749	651	45	606	-236	170	16078	0	634	3289	15444	17.6%	82.4%	Adjusted

2012 Adjusted for two Major Projects: Remove \$883 from Long-Term Debt to represent the capitalized cost of Bipole III, Keeyask, MMTP, and GNTL

2012	2450	34	26	0	2390	318	33	285	327	100	8202	372	42	3102	7787.5	28.49%	71.51%	Adjusted
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2017 Adjusted for two Major Projects: Remove \$6483 from Long-Term Debt to represent the capitalized cost of Bipole III, Keeyask, MMTP, and GNTL

2017	2899	69	69	12	2749	651	45	606	-236	170	9595	0	634	3289	8961	26.8%	73.2%	Adjusted
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MH 2017 Adjusted for IFRS Impact, Major Projects and Removal of Non-Operational or Non-Recurring Cash Injections

Conawapa Work in Progress		-379
Bipole III Deferred Revenues <sup>1</sup>	-196	196
Wind Farm Loan Repayment <sup>2</sup>		250
Bipole III Interest Capitalized <sup>3</sup>	-55	55
Export Revenues Attributable to Above Average Water <sup>3</sup>	-219	219
Non-Recurring Gain <sup>4</sup>	-20	20
	<u>-490</u>	<u>361</u>
	2799	9322
		23.1%
		76.9%
2012 CGAAP (above) - adjusted for major projects		28.5%
		71.5%
Deterioration in Ratios		-5.4%
		5.4%

<sup>1</sup> The Manitoba Hydro-Electric Board 65th Annual Report, Note 26, p.84

<sup>2</sup> Appendix 6.1, The Manitoba Hydro-Electric Board 64th Annual Report, Note 21, p.83

<sup>3</sup> Manitoba Hydro Exhibit #64, slide 44

<sup>4</sup> The Manitoba Hydro-Electric Board 65th Annual Report, Note 26, p.84