

## Board Counsel Book of Documents

### Volume 1

#### Policy Panel

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## Electric Operations Financial Statements

Tab 4 Appendix 4.1 provides the 20-year Electric Operations Financial Forecast Scenario financial statements and key financial measures. Please refer to the following Figures.

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Figure 1 Electric Operations Operating Statement – 2022/23 to 2031/32

<b>ELECTRIC OPERATIONS PROJECTED OPERATING STATEMENT</b>										
<b>Amended Financial Forecast Scenario</b>										
<b>(In Millions of Dollars)</b>										
<i>For the year ended March 31</i>	<b>2022/23</b>	<b>2023/24</b>	<b>2024/25</b>	<b>2025/26</b>	<b>2026/27</b>	<b>2027/28</b>	<b>2028/29</b>	<b>2029/30</b>	<b>2030/31</b>	<b>2031/32</b>
<b>REVENUES</b>										
Domestic Revenue										
at approved rates	1 875	1 847	1 853	1 863	1 874	1 888	1 904	1 922	1 943	1 973
additional	-	24	74	113	153	195	238	284	331	382
Extraprovincial	1 283	1 153	964	780	778	754	740	748	768	766
Other	29	29	29	30	31	32	37	38	39	40
	<b>3 186</b>	<b>3 052</b>	<b>2 920</b>	<b>2 786</b>	<b>2 836</b>	<b>2 869</b>	<b>2 919</b>	<b>2 991</b>	<b>3 081</b>	<b>3 161</b>
<b>EXPENSES</b>										
Operating and Administrative	589	657	687	683	697	711	724	736	739	754
Net Finance Expense	909	900	886	906	915	927	936	946	949	923
Depreciation and Amortization	618	632	643	657	669	688	707	727	750	773
Water Rentals and Assessments	81	83	79	76	77	78	78	78	78	78
Fuel and Power Purchased	139	163	156	182	173	173	176	177	198	186
Capital and Other Taxes	160	162	163	165	166	168	170	171	173	175
Other Expenses	118	80	74	72	72	77	80	83	83	79
Corporate Allocation	7	7	7	7	7	7	7	3	1	1
	<b>2 621</b>	<b>2 684</b>	<b>2 695</b>	<b>2 748</b>	<b>2 777</b>	<b>2 828</b>	<b>2 877</b>	<b>2 922</b>	<b>2 972</b>	<b>2 970</b>
Net Income before Net Movement in Reg. Deferral	565	368	224	38	59	41	42	69	110	191
Net Movement in Regulatory Deferral	190	106	77	118	114	62	57	50	4	(12)
<b>Net Income</b>	<b>755</b>	<b>474</b>	<b>301</b>	<b>156</b>	<b>173</b>	<b>104</b>	<b>99</b>	<b>119</b>	<b>113</b>	<b>178</b>
<b>Net Income Attributable to:</b>										
<b>Manitoba Hydro</b>	<b>751</b>	<b>469</b>	<b>295</b>	<b>149</b>	<b>166</b>	<b>97</b>	<b>92</b>	<b>111</b>	<b>105</b>	<b>169</b>
Wuskwatim Investment Entity	4	5	6	7	7	7	7	8	9	9
Keeyask Investment Entity	0	0	0	0	0	0	0	0	0	0
Total Non-Controlling Interests	4	5	6	7	7	7	7	8	9	9
	<b>755</b>	<b>474</b>	<b>301</b>	<b>156</b>	<b>173</b>	<b>104</b>	<b>99</b>	<b>119</b>	<b>113</b>	<b>178</b>
Percent Increase	-	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Cumulative Percent Increase	-	2.00%	4.04%	6.12%	8.24%	10.41%	12.62%	14.87%	17.17%	19.51%

Figure 2 Electric Operations Balance Sheet – 2022/23 to 2031/32

	ELECTRIC OPERATIONS PROJECTED BALANCE SHEET Amended Financial Forecast Scenario (In Millions of Dollars)									
<i>For the year ended March 31</i>	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
<b>ASSETS</b>										
Plant in Service	28 814	29 416	30 089	30 739	31 593	32 345	33 112	33 929	34 789	35 693
Accumulated Depreciation	(3 525)	(4 083)	(4 638)	(5 186)	(5 773)	(6 409)	(7 044)	(7 706)	(8 390)	(9 096)
Net Plant in Service	25 288	25 333	25 451	25 553	25 820	25 935	26 068	26 223	26 399	26 597
Construction in Progress	470	512	472	484	319	328	336	343	350	357
Current and Other Assets	2 222	1 513	1 630	1 688	1 550	1 636	1 744	1 599	1 701	1 892
Goodwill and Intangible Assets	1 034	1 006	981	954	925	896	866	836	805	774
Total Assets before Regulatory Deferral	29 014	28 364	28 535	28 678	28 614	28 796	29 013	29 000	29 255	29 621
Regulatory Deferral Balance	1 389	1 426	1 503	1 572	1 637	1 700	1 757	1 807	1 811	1 798
	30 403	29 790	30 038	30 251	30 251	30 495	30 770	30 807	31 066	31 419
<b>LIABILITIES AND EQUITY</b>										
Long-Term Debt	22 408	21 912	21 747	21 494	21 186	21 078	21 987	21 440	21 968	22 750
Current and Other Liabilities	3 931	3 389	3 440	3 742	3 861	4 089	3 336	3 783	3 379	2 748
Provisions	67	65	63	61	59	56	54	52	51	50
Deferred Revenue	626	683	755	830	891	917	945	973	1 004	1 038
Retained Earnings	3 575	4 044	4 339	4 488	4 654	4 751	4 843	4 953	5 058	5 227
Accumulated Other Comprehensive Income	(371)	(402)	(404)	(413)	(401)	(396)	(394)	(394)	(394)	(394)
Total Liabilities and Equity before Regulatory Deferral	30 236	29 692	29 940	30 202	30 251	30 495	30 770	30 807	31 066	31 419
Regulatory Deferral Balance	166	98	98	49	0	0	0	0	0	0
	30 403	29 790	30 038	30 251	30 251	30 495	30 770	30 807	31 066	31 419

Figure 3 Electric Operations Projected Indirect Cash Flow Statement – 2022/23 to 2031/32

<b>ELECTRIC OPERATIONS PROJECTED INDIRECT CASH FLOW STATEMENT</b>										
<b>Amended Financial Forecast Scenario</b>										
<b>(In Millions of Dollars)</b>										
<i>For the year ended March 31</i>	<b>2022/23</b>	<b>2023/24</b>	<b>2024/25</b>	<b>2025/26</b>	<b>2026/27</b>	<b>2027/28</b>	<b>2028/29</b>	<b>2029/30</b>	<b>2030/31</b>	<b>2031/32</b>
<b>OPERATING ACTIVITIES</b>										
Net Income (Loss)	755	474	301	156	173	104	99	119	113	178
Net Movement in Regulatory Deferral	(190)	(106)	(77)	(118)	(114)	(62)	(57)	(50)	(4)	12
Add Back:										
Depreciation and Amortization	618	632	643	657	669	688	707	727	750	773
Net Finance Expense	909	900	886	906	915	927	936	946	949	923
Adjustments for Non-Cash Items	39	13	13	12	11	10	6	2	(1)	(2)
Adjustments for Non-Cash Working Capital Accounts	(6)	82	41	43	45	46	47	48	49	50
Interest Paid	(1 064)	(834)	(935)	(941)	(936)	(946)	(962)	(978)	(979)	(950)
Interest Received	24	15	10	9	5	4	5	2	1	2
<b>Cash Provided by Operating Activities</b>	<b>1 084</b>	<b>1 176</b>	<b>882</b>	<b>724</b>	<b>770</b>	<b>770</b>	<b>780</b>	<b>816</b>	<b>879</b>	<b>987</b>
<b>FINANCING ACTIVITIES</b>										
Proceeds from Long-Term Debt	657	350	750	920	970	1 360	1 590	550	1 190	780
Retirement of Long-Term Debt	(1 103)	(1 439)	(875)	(901)	(1 183)	(1 274)	(1 468)	(680)	(1 096)	(663)
Repayments from/(Advances to) Investment Entities	22	(0)	(0)	(0)	(0)	(0)	(0)	(0)	7	11
Contributions from Non-Controlling Interests	0	0	0	0	0	0	0	0	0	0
Proceeds from Short-Term Borrowings, Net	0	0	0	0	0	0	0	0	0	0
Sinking Fund Investment Withdrawals	248	244	234	233	234	232	233	234	234	235
Sinking Fund Investment Purchases	(248)	(244)	(234)	(233)	(234)	(232)	(233)	(234)	(234)	(235)
Other	(1)	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(11)
<b>Cash Provided by Financing Activities</b>	<b>(425)</b>	<b>(1 090)</b>	<b>(126)</b>	<b>18</b>	<b>(214)</b>	<b>86</b>	<b>122</b>	<b>(131)</b>	<b>94</b>	<b>116</b>
<b>INVESTING ACTIVITIES</b>										
Additions to Property, Plant and Equipment	(672)	(692)	(699)	(735)	(713)	(756)	(784)	(825)	(867)	(911)
Additions to Intangible Assets	(20)	(12)	(18)	(14)	(13)	(13)	(13)	(13)	(14)	(14)
Net Contributions Received	44	72	81	83	74	38	41	45	48	53
Cash Paid for Mitigation and Major Development Obligations	(103)	(57)	(52)	(55)	(54)	(54)	(55)	(55)	(50)	(51)
Cash Paid for Transmission Rights Obligations	(21)	(20)	(19)	(19)	(18)	(17)	(16)	(15)	(15)	(14)
Other	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	(0)
<b>Cash Used for Investing Activities</b>	<b>(774)</b>	<b>(711)</b>	<b>(708)</b>	<b>(741)</b>	<b>(725)</b>	<b>(803)</b>	<b>(827)</b>	<b>(865)</b>	<b>(898)</b>	<b>(937)</b>
<b>Net Increase (Decrease) in Cash</b>	<b>(114)</b>	<b>(625)</b>	<b>48</b>	<b>0</b>	<b>(169)</b>	<b>53</b>	<b>74</b>	<b>(180)</b>	<b>75</b>	<b>166</b>
<b>Cash at Beginning of Year</b>	<b>1 047</b>	<b>933</b>	<b>308</b>	<b>357</b>	<b>357</b>	<b>188</b>	<b>241</b>	<b>315</b>	<b>135</b>	<b>210</b>
<b>Cash at End of Year</b>	<b>933</b>	<b>308</b>	<b>357</b>	<b>357</b>	<b>188</b>	<b>241</b>	<b>315</b>	<b>135</b>	<b>210</b>	<b>376</b>



Figure 4 Electric Operations Projected Direct Cash Flow Statement – 2022/23 to 2031/32

ELECTRIC OPERATIONS PROJECTED DIRECT CASH FLOW STATEMENT										
Amended Financial Forecast Scenario										
(In Millions of Dollars)										
<i>For the year ended March 31</i>	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
<b>OPERATING ACTIVITIES</b>										
Cash Receipts from Customers	3 174	3 039	2 907	2 772	2 822	2 853	2 899	2 971	3 060	3 139
Cash Paid to Suppliers and Employees	(1 049)	(1 044)	(1 099)	(1 116)	(1 121)	(1 141)	(1 162)	(1 178)	(1 203)	(1 203)
Interest Paid	(1 064)	(834)	(935)	(941)	(936)	(946)	(962)	(978)	(979)	(950)
Interest Received	24	15	10	9	5	4	5	2	1	2
<b>Cash Provided by Operating Activities</b>	<b>1 084</b>	<b>1 176</b>	<b>882</b>	<b>724</b>	<b>770</b>	<b>770</b>	<b>780</b>	<b>816</b>	<b>879</b>	<b>987</b>
<b>FINANCING ACTIVITIES</b>										
Proceeds from Long-Term Debt	21	(2)	(1)	(1)	(1)					
Retirement of Long-Term Debt	657	350	750	920	970	1 360	1 590	550	1 190	780
Repayments from/(Advances to) External Entities	(1 103)	(1 439)	(875)	(901)	(1 183)	(1 274)	(1 468)	(680)	(1 096)	(663)
Contributions from Non-Controlling Interests	22	(0)	(0)	(0)	(0)	(0)	(0)	(0)	7	11
Proceeds from Short-Term Borrowings, Net	0	0	0	0	0	0	0	0	0	0
Sinking Fund Investment Withdrawals	0	0	0	0	0	0	0	0	0	0
Sinking Fund Investment Purchases	248	244	234	233	234	232	233	234	234	235
Other	(248)	(244)	(234)	(233)	(234)	(232)	(233)	(234)	(234)	(235)
<b>Cash Provided by Financing Activities</b>	<b>(425)</b>	<b>(1 090)</b>	<b>(126)</b>	<b>18</b>	<b>(214)</b>	<b>86</b>	<b>122</b>	<b>(131)</b>	<b>94</b>	<b>116</b>
<b>INVESTING ACTIVITIES</b>										
Additions to Property, Plant and Equipment	(672)	(692)	(699)	(735)	(713)	(756)	(784)	(825)	(867)	(911)
Additions to Intangible Assets	(20)	(12)	(18)	(14)	(13)	(13)	(13)	(13)	(14)	(14)
Net Contributions Received	44	72	81	83	74	38	41	45	48	53
Cash Paid for Mitigation and Major Development Obligations	(103)	(57)	(52)	(55)	(54)	(54)	(55)	(55)	(50)	(51)
Cash Paid for Transmission Rights Obligations	(21)	(20)	(19)	(19)	(18)	(17)	(16)	(15)	(15)	(14)
Other	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(0)	(0)
<b>Cash Used for Investing Activities</b>	<b>(774)</b>	<b>(711)</b>	<b>(708)</b>	<b>(741)</b>	<b>(725)</b>	<b>(803)</b>	<b>(827)</b>	<b>(865)</b>	<b>(898)</b>	<b>(937)</b>
<b>Net Increase (Decrease) in Cash</b>	<b>(114)</b>	<b>(625)</b>	<b>48</b>	<b>0</b>	<b>(169)</b>	<b>53</b>	<b>74</b>	<b>(180)</b>	<b>75</b>	<b>166</b>
<b>Cash at Beginning of Year</b>	<b>1 047</b>	<b>933</b>	<b>308</b>	<b>357</b>	<b>357</b>	<b>188</b>	<b>241</b>	<b>315</b>	<b>135</b>	<b>210</b>
<b>Cash at End of Year</b>	<b>933</b>	<b>308</b>	<b>357</b>	<b>357</b>	<b>188</b>	<b>241</b>	<b>315</b>	<b>135</b>	<b>210</b>	<b>376</b>

Figure 5 Electric Operations Projected Operating Statement – 2032/33 to 2041/42

ELECTRIC OPERATIONS PROJECTED OPERATING STATEMENT Amended Financial Forecast Scenario (In Millions of Dollars)										
<i>For the year ended March 31</i>	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42
<b>REVENUES</b>										
Domestic Revenue										
at approved rates	2 010	2 051	2 095	2 151	2 212	2 274	2 337	2 400	2 466	2 528
additional	437	495	558	627	702	781	866	955	1 050	1 148
Extraprovincial	754	762	783	707	693	705	682	643	615	588
Other	41	43	45	49	53	56	58	61	64	65
	<u>3 242</u>	<u>3 352</u>	<u>3 482</u>	<u>3 534</u>	<u>3 660</u>	<u>3 816</u>	<u>3 942</u>	<u>4 059</u>	<u>4 195</u>	<u>4 329</u>
<b>EXPENSES</b>										
Operating and Administrative	769	785	800	816	833	849	872	896	914	939
Net Finance Expense	928	929	929	915	904	900	893	876	863	853
Depreciation and Amortization	797	824	851	878	908	945	984	1 016	1 055	1 095
Water Rentals and Assessments	78	79	80	80	80	80	80	80	81	81
Fuel and Power Purchased	191	214	232	270	317	387	403	393	426	436
Capital and Other Taxes	177	181	182	184	187	189	191	194	196	198
Other Expenses	86	89	91	94	97	100	104	107	111	113
Corporate Allocation	1	1	1	1	1	1	1	1	1	1
	<u>3 027</u>	<u>3 101</u>	<u>3 166</u>	<u>3 239</u>	<u>3 327</u>	<u>3 452</u>	<u>3 528</u>	<u>3 563</u>	<u>3 647</u>	<u>3 717</u>
Net Income before Net Movement in Reg. Deferral	215	251	316	295	332	363	414	496	548	612
Net Movement in Regulatory Deferral	(15)	(21)	(26)	(33)	(37)	(42)	(40)	(39)	(23)	(24)
<b>Net Income</b>	<u>200</u>	<u>230</u>	<u>289</u>	<u>262</u>	<u>295</u>	<u>322</u>	<u>374</u>	<u>457</u>	<u>526</u>	<u>589</u>
<b>Net Income Attributable to:</b>										
<b>Manitoba Hydro</b>	<b>190</b>	<b>219</b>	<b>277</b>	<b>250</b>	<b>282</b>	<b>309</b>	<b>358</b>	<b>439</b>	<b>507</b>	<b>569</b>
Wuskwatim Investment Entity	10	11	12	12	13	13	16	17	18	19
Keeyask Investment Entity	0	0	0	0	0	0	0	0	0	0
Total Non-Controlling Interests	<u>10</u>	<u>11</u>	<u>12</u>	<u>12</u>	<u>13</u>	<u>13</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>
	<u>200</u>	<u>230</u>	<u>289</u>	<u>262</u>	<u>295</u>	<u>322</u>	<u>374</u>	<u>457</u>	<u>526</u>	<u>589</u>
Percent Increase	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Cumulative Percent Increase	21.90%	24.34%	26.82%	29.36%	31.95%	34.59%	37.28%	40.02%	42.82%	45.68%

Figure 6 Electric Operations Projected Balance Sheet – 2032/33 to 2041/42

ELECTRIC OPERATIONS PROJECTED BALANCE SHEET Amended Financial Forecast Scenario (In Millions of Dollars)										
<i>For the year ended March 31</i>	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42
<b>ASSETS</b>										
Plant in Service	36 672	37 680	38 768	39 910	41 171	42 495	43 923	45 182	46 564	48 003
Accumulated Depreciation	(9 818)	(10 579)	(11 346)	(12 134)	(12 963)	(13 841)	(14 753)	(15 690)	(16 642)	(17 650)
Net Plant in Service	26 853	27 101	27 422	27 776	28 208	28 655	29 170	29 491	29 922	30 354
Construction in Progress	365	373	381	492	753	662	536	826	726	569
Current and Other Assets	2 134	2 654	2 772	2 575	2 571	2 502	2 467	2 466	2 367	2 528
Goodwill and Intangible Assets	743	713	683	652	622	592	562	532	502	472
Total Assets before Regulatory Deferral	30 095	30 841	31 258	31 497	32 154	32 411	32 735	33 315	33 517	33 923
Regulatory Deferral Balance	1 783	1 763	1 736	1 704	1 666	1 625	1 585	1 546	1 523	1 499
	31 879	32 604	32 994	33 200	33 820	34 036	34 320	34 860	35 040	35 422
<b>LIABILITIES AND EQUITY</b>										
Long-Term Debt	22 932	23 256	22 943	22 786	22 602	22 316	22 180	21 928	21 442	21 024
Current and Other Liabilities	2 762	2 870	3 144	3 063	3 304	3 465	3 408	3 551	3 675	3 872
Provisions	49	48	47	45	44	43	42	40	39	38
Deferred Revenue	1 113	1 189	1 342	1 538	1 821	1 853	1 973	2 184	2 218	2 254
Retained Earnings	5 417	5 635	5 912	6 162	6 444	6 753	7 112	7 551	8 058	8 628
Accumulated Other Comprehensive Income	(394)	(394)	(394)	(394)	(394)	(394)	(394)	(394)	(394)	(394)
Total Liabilities and Equity before Regulatory Deferral	31 879	32 604	32 994	33 200	33 820	34 036	34 320	34 860	35 040	35 422
Regulatory Deferral Balance	0	0	0	0	0	0	0	0	0	0
	31 879	32 604	32 994	33 200	33 820	34 036	34 320	34 860	35 040	35 422

Figure 7 Electric Operations Projected Indirect Cash Flow Statement – 2032/33 to 2041/42

ELECTRIC OPERATIONS PROJECTED INDIRECT CASH FLOW STATEMENT										
Amended Financial Forecast Scenario										
(In Millions of Dollars)										
<i>For the year ended March 31</i>	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42
<b>OPERATING ACTIVITIES</b>										
Net Income (Loss)	200	230	289	262	295	322	374	457	526	589
Net Movement in Regulatory Deferral	15	21	26	33	37	42	40	39	23	24
Add Back:										
Depreciation and Amortization	797	824	851	878	908	945	984	1 016	1 055	1 095
Net Finance Expense	928	929	929	915	904	900	893	876	863	853
Adjustments for Non-Cash Items	(3)	(4)	(6)	(9)	(13)	(16)	(17)	(20)	(23)	(24)
Adjustments for Non-Cash Working Capital Accounts	51	52	53	54	55	57	58	59	60	61
Interest Paid	(961)	(961)	(966)	(959)	(949)	(946)	(936)	(926)	(914)	(899)
Interest Received	6	6	8	7	5	5	4	8	7	7
<b>Cash Provided by Operating Activities</b>	<b>1 033</b>	<b>1 096</b>	<b>1 185</b>	<b>1 182</b>	<b>1 243</b>	<b>1 308</b>	<b>1 399</b>	<b>1 508</b>	<b>1 596</b>	<b>1 706</b>
<b>FINANCING ACTIVITIES</b>										
Proceeds from Long-Term Debt	160	370	(40)	(10)	150	160	200	170	0	200
Retirement of Long-Term Debt	0	20	(49)	(275)	(150)	(338)	(449)	(339)	(425)	(488)
Repayments from/(Advances to) Investment Entities	9	10	11	12	12	12	12	15	16	16
Contributions from Non-Controlling Interests	0	0	0	0	0	0	0	0	0	0
Proceeds from Short-Term Borrowings, Net	0	0	0	0	0	0	0	0	0	0
Sinking Fund Investment Withdrawals	236	237	241	240	238	238	236	234	232	228
Sinking Fund Investment Purchases	(236)	(237)	(241)	(240)	(238)	(238)	(236)	(234)	(232)	(228)
Other	(11)	(12)	(13)	(14)	(14)	(15)	(14)	(18)	(19)	(20)
<b>Cash Provided by Financing Activities</b>	<b>158</b>	<b>388</b>	<b>(91)</b>	<b>(287)</b>	<b>(2)</b>	<b>(180)</b>	<b>(251)</b>	<b>(171)</b>	<b>(428)</b>	<b>(291)</b>
<b>INVESTING ACTIVITIES</b>										
Additions to Property, Plant and Equipment	(993)	(1 010)	(1 109)	(1 270)	(1 517)	(1 218)	(1 294)	(1 539)	(1 297)	(1 286)
Additions to Intangible Assets	(14)	(15)	(15)	(16)	(16)	(16)	(17)	(17)	(18)	(18)
Net Contributions Received	95	98	186	232	322	73	163	257	81	84
Cash Paid for Mitigation and Major Development Obligations	(51)	(50)	(50)	(51)	(50)	(51)	(52)	(53)	(54)	(55)
Cash Paid for Transmission Rights Obligations	(13)	(12)	(12)	(11)	(10)	(10)	(9)	(9)	(1)	0
Other	(0)	0	0	0	0	0	0	0	0	0
<b>Cash Used for Investing Activities</b>	<b>(977)</b>	<b>(989)</b>	<b>(1 001)</b>	<b>(1 117)</b>	<b>(1 271)</b>	<b>(1 223)</b>	<b>(1 209)</b>	<b>(1 361)</b>	<b>(1 290)</b>	<b>(1 276)</b>
<b>Net Increase (Decrease) in Cash</b>	<b>214</b>	<b>495</b>	<b>93</b>	<b>(222)</b>	<b>(30)</b>	<b>(94)</b>	<b>(61)</b>	<b>(24)</b>	<b>(122)</b>	<b>140</b>
<b>Cash at Beginning of Year</b>	<b>376</b>	<b>590</b>	<b>1 085</b>	<b>1 178</b>	<b>956</b>	<b>926</b>	<b>832</b>	<b>771</b>	<b>747</b>	<b>625</b>
<b>Cash at End of Year</b>	<b>590</b>	<b>1 085</b>	<b>1 178</b>	<b>956</b>	<b>926</b>	<b>832</b>	<b>771</b>	<b>747</b>	<b>625</b>	<b>765</b>

Figure 8 Electric Operations Projected Direct Cash Flow Statement – 2032/33 to 2041/42

<b>ELECTRIC OPERATIONS PROJECTED DIRECT CASH FLOW STATEMENT</b>										
<b>Amended Financial Forecast Scenario</b>										
<b>(In Millions of Dollars)</b>										
<i>For the year ended March 31</i>	<b>2032/33</b>	<b>2033/34</b>	<b>2034/35</b>	<b>2035/36</b>	<b>2036/37</b>	<b>2037/38</b>	<b>2038/39</b>	<b>2039/40</b>	<b>2040/41</b>	<b>2041/42</b>
<b>OPERATING ACTIVITIES</b>										
Cash Receipts from Customers	3 219	3 327	3 456	3 505	3 627	3 780	3 905	4 019	4 152	4 285
Cash Paid to Suppliers and Employees	(1 231)	(1 276)	(1 313)	(1 372)	(1 440)	(1 531)	(1 574)	(1 593)	(1 649)	(1 687)
Interest Paid	(961)	(961)	(966)	(959)	(949)	(946)	(936)	(926)	(914)	(899)
Interest Received	6	6	8	7	5	5	4	8	7	7
<b>Cash Provided by Operating Activities</b>	<b>1 033</b>	<b>1 096</b>	<b>1 185</b>	<b>1 182</b>	<b>1 243</b>	<b>1 308</b>	<b>1 399</b>	<b>1 508</b>	<b>1 596</b>	<b>1 706</b>
<b>FINANCING ACTIVITIES</b>										
Proceeds from Long-Term Debt	160	370	(40)	(10)	150	160	200	170	0	200
Retirement of Long-Term Debt	0	20	(49)	(275)	(150)	(338)	(449)	(339)	(425)	(488)
Repayments from/(Advances to) External Entities	9	10	11	12	12	12	12	15	16	16
Contributions from Non-Controlling Interests	0	0	0	0	0	0	0	0	0	0
Proceeds from Short-Term Borrowings, Net	0	0	0	0	0	0	0	0	0	0
Sinking Fund Investment Withdrawals	236	237	241	240	238	238	236	234	232	228
Sinking Fund Investment Purchases	(236)	(237)	(241)	(240)	(238)	(238)	(236)	(234)	(232)	(228)
Other	(11)	(12)	(13)	(14)	(14)	(15)	(14)	(18)	(19)	(20)
<b>Cash Provided by Financing Activities</b>	<b>158</b>	<b>388</b>	<b>(91)</b>	<b>(287)</b>	<b>(2)</b>	<b>(180)</b>	<b>(251)</b>	<b>(171)</b>	<b>(428)</b>	<b>(291)</b>
<b>INVESTING ACTIVITIES</b>										
Additions to Property, Plant and Equipment	(993)	(1 010)	(1 109)	(1 270)	(1 517)	(1 218)	(1 294)	(1 539)	(1 297)	(1 286)
Additions to Intangible Assets	(14)	(15)	(15)	(16)	(16)	(16)	(17)	(17)	(18)	(18)
Net Contributions Received	95	98	186	232	322	73	163	257	81	84
Cash Paid for Mitigation and Major Development Obligations	(51)	(50)	(50)	(51)	(50)	(51)	(52)	(53)	(54)	(55)
Cash Paid for Transmission Rights Obligations	(13)	(12)	(12)	(11)	(10)	(10)	(9)	(9)	(1)	0
Other	(0)	0	0	0	0	0	0	0	0	0
<b>Cash Used for Investing Activities</b>	<b>(977)</b>	<b>(989)</b>	<b>(1 001)</b>	<b>(1 117)</b>	<b>(1 271)</b>	<b>(1 223)</b>	<b>(1 209)</b>	<b>(1 361)</b>	<b>(1 290)</b>	<b>(1 276)</b>
<b>Net Increase (Decrease) in Cash</b>	<b>214</b>	<b>495</b>	<b>93</b>	<b>(222)</b>	<b>(30)</b>	<b>(94)</b>	<b>(61)</b>	<b>(24)</b>	<b>(122)</b>	<b>140</b>
<b>Cash at Beginning of Year</b>	<b>376</b>	<b>590</b>	<b>1 085</b>	<b>1 178</b>	<b>956</b>	<b>926</b>	<b>832</b>	<b>771</b>	<b>747</b>	<b>625</b>
<b>Cash at End of Year</b>	<b>590</b>	<b>1 085</b>	<b>1 178</b>	<b>956</b>	<b>926</b>	<b>832</b>	<b>771</b>	<b>747</b>	<b>625</b>	<b>765</b>

Figure 9 Electric Operations Amended Financial Forecast Scenario – Key Financial Measures

	ELECTRIC OPERATIONS KEY FINANCIAL MEASURES																			
	Amended Financial Forecast Scenario																			
<i>For the year ended March 31</i>	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Annual Rate Increases	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Cumulative Rate Increases	0.00%	2.00%	4.04%	6.12%	8.24%	10.41%	12.62%	14.87%	17.17%	19.51%	21.90%	24.34%	26.82%	29.36%	31.95%	34.59%	37.28%	40.02%	42.82%	45.68%
Net Income/(Loss)	\$751	\$469	\$295	\$149	\$166	\$97	\$92	\$111	\$105	\$169	\$190	\$219	\$277	\$250	\$282	\$309	\$358	\$439	\$507	\$569
Net Income/(Loss) before Net Movement in Reg. Deferral	\$565	\$368	\$224	\$38	\$59	\$41	\$42	\$69	\$110	\$191	\$215	\$251	\$316	\$295	\$332	\$363	\$414	\$496	\$548	\$612
Retained Earnings	\$3 575	\$4 044	\$4 339	\$4 488	\$4 654	\$4 751	\$4 843	\$4 953	\$5 058	\$5 227	\$5 417	\$5 635	\$5 912	\$6 162	\$6 444	\$6 753	\$7 112	\$7 551	\$8 058	\$8 628
Total Equity	\$4 030	\$4 511	\$4 883	\$5 055	\$5 255	\$5 393	\$5 523	\$5 663	\$5 797	\$6 000	\$6 264	\$6 559	\$6 990	\$7 438	\$8 004	\$8 346	\$8 825	\$9 476	\$10 018	\$10 623
Net Debt	\$22 963	\$22 529	\$22 341	\$22 371	\$22 322	\$22 356	\$22 401	\$22 451	\$22 471	\$22 424	\$22 372	\$22 270	\$22 090	\$22 030	\$22 063	\$21 983	\$21 798	\$21 656	\$21 355	\$20 930
Change in Net Debt - Inc/(Dec)	(\$330)	(\$435)	(\$187)	\$29	(\$48)	\$33	\$46	\$49	\$21	(\$47)	(\$52)	(\$102)	(\$180)	(\$60)	\$33	(\$80)	(\$185)	(\$141)	(\$302)	(\$425)
Cash Provided by Operating Activities	\$1 084	\$1 176	\$882	\$724	\$770	\$770	\$780	\$816	\$879	\$987	\$1 033	\$1 096	\$1 185	\$1 182	\$1 243	\$1 308	\$1 399	\$1 508	\$1 596	\$1 706
Cash Used for Investing Activities	(\$774)	(\$711)	(\$708)	(\$741)	(\$725)	(\$803)	(\$827)	(\$865)	(\$898)	(\$937)	(\$977)	(\$989)	(\$1 001)	(\$1 117)	(\$1 271)	(\$1 223)	(\$1 209)	(\$1 361)	(\$1 290)	(\$1 276)
Cash Surplus/(Deficit)	\$310	\$465	\$174	(\$17)	\$45	(\$33)	(\$47)	(\$49)	(\$19)	\$50	\$56	\$106	\$184	\$65	(\$28)	\$86	\$190	\$147	\$306	\$430
Self Financing Ratio	140%	165%	125%	98%	106%	96%	94%	94%	98%	105%	106%	111%	118%	106%	98%	107%	116%	111%	124%	134%
Cash Flow to Net Debt	4.7%	5.2%	3.9%	3.2%	3.5%	3.4%	3.5%	3.6%	3.9%	4.4%	4.6%	4.9%	5.4%	5.4%	5.6%	6.0%	6.4%	7.0%	7.5%	8.2%
Net Finance Expense	\$909	\$900	\$886	\$906	\$915	\$927	\$936	\$946	\$949	\$923	\$928	\$929	\$929	\$915	\$904	\$900	\$893	\$876	\$863	\$853
Debt Ratio	85%	83%	82%	82%	81%	81%	80%	80%	79%	78%	77%	76%	75%	73%	72%	71%	70%	68%	66%	
Interest Paid	\$1 064	\$834	\$935	\$941	\$936	\$946	\$962	\$978	\$979	\$950	\$961	\$961	\$966	\$959	\$949	\$946	\$936	\$926	\$914	\$899
EBIT Interest Coverage Ratio	1.80	1.51	1.32	1.16	1.18	1.10	1.10	1.11	1.11	1.18	1.20	1.23	1.29	1.27	1.30	1.33	1.39	1.48	1.57	1.65
EBITDA Interest Coverage Ratio	2.48	2.21	2.06	1.92	1.95	1.89	1.90	1.95	1.99	2.12	2.17	2.24	2.33	2.36	2.44	2.53	2.64	2.79	2.92	3.07
Capital Coverage Ratio	2.26	2.23	1.61	1.20	1.21	1.08	1.06	1.06	1.08	1.16	1.16	1.21	1.29	1.27	1.32	1.37	1.43	1.52	1.59	1.66

In its Reply submissions, Manitoba Hydro clarifies that it is not alleging a breach of procedural fairness in its R&V Application, but rather a lack of reasons. Seeking clarification and review in compliance with the Board's Rules in advance of the November 15, 2022 filing date for its next General Rate Application is seen by Manitoba Hydro as appropriate to ensure it meets the Board's requirements and expectations.

b. To Review and Vary Directive 4 – for Manitoba Hydro to provide a long-term financial forecast in the next General Rate Application:

Manitoba Hydro recognizes that the PUB may direct the Utility to prepare documents to assist in the Board discharging its rate-setting mandate. **However, Manitoba Hydro intends to restrict the financial forecasts used in the management of its business to two or three years.**

Manitoba Hydro acknowledges that, in some circumstances, longer-term financial scenarios are prepared for the limited purpose of demonstrating the Utility's self-sufficiency to credit rating agencies. However, such long-term financial scenarios are not reflective of Manitoba Hydro's long-term financial planning or rate strategy as they do not incorporate inputs related to the evolving energy landscape nor are they approved by the Manitoba Hydro-Electric Board.

**For the Board's use only in rate-setting at the next General Rate Application, Manitoba Hydro offered to provide a 20-year financial scenario that incorporates the two to three-year financial forecast approved by the Manitoba Hydro-Electric Board and used by management in the operations of the Utility.**

c. To Review and Vary Directive 6 – to demonstrate savings in Business Operations Capital spending:

Manitoba Hydro acknowledges the Board's authority to consider several factors related to capital expenditures when setting electricity rates. However, the Utility reminds the

In compliance with Manitoba law, and for Manitoba Hydro's 2021/22 interim rates, the Board varied the Utility's requested 5% increase in General Consumers Revenue and found that a 3.6% increase was just and reasonable and in the public interest. In so doing, the Board balanced the financial health of Manitoba Hydro and the interests of the monopoly Utility's customers.

In Order 137/21 the Board found, *"This increase recognizes the financial consequences of the drought and the Board's objective to avoid rate shock by smoothing the rate increases required to address the costs of major capital projects entering service."*

In Order 9/22 the Board found, *"In this Interim Application, the Board did not find sufficient evidence to allow it to divide the awarded increase into separate categories of "drought rate increase" and "base operations rate increase". This is a matter that the Board will consider further at the 2022/23 General Rate Application when Manitoba Hydro seeks to finalize the 2021/22 interim rates."*

All Parties recognize that when Manitoba Hydro applies to finalize its 2021/22 interim rates, it may file evidence seeking to confirm, or alternatively vary, the interim 3.6% increase approved by the Board in Order 9/22.

The Board found that a limitation in the Utility's Interim Application, acknowledged by Manitoba Hydro, was that it does not currently have a long-term financial forecast being used in the management of the Utility. For reasons explained by Manitoba Hydro's management, the last such long-term financial forecast utilized by Manitoba Hydro was its updated Integrated Financial Forecast IFF16, notwithstanding that Manitoba Hydro represented at the 2019/20 GRA that it would file a new IFF in the next GRA, anticipated before the end of 2019. Without such a current planning document, the Board was at a disadvantage when considering the important concepts of rate setting, rate smoothing, and reasonable rate trajectories when balancing the interests of ratepayers with the financial health of Manitoba Hydro. These concepts and the Board's corresponding findings are explained in detail in prior Board Orders, including Orders 59/18 and 69/19.



For the purposes of its rate-setting at Manitoba Hydro's next General Rate Application, the Board expects the long-term financial forecast presented by Manitoba Hydro will include disclosure of all the underlying assumptions, including the financial metrics used in its preparation. The Board understands that the financial information Manitoba Hydro provides the bond rating agencies consists of assumptions and financial projections. **The Board further recognizes that the long-term financial forecast(s) provided may be neither approved by the Manitoba Hydro-Electric Board nor used past the short-term by the Utility's management.**

In its Orders, the Board found that it does not have the legal jurisdiction to approve specific capital programs or order Manitoba Hydro to reduce its capital spending. In its interim Orders the Board has not directed any specific cuts to individual Business Operations Capital expenditures nor any Operating & Administrative expenditures. The Board will assess Manitoba Hydro's efforts to control costs when adjudicating the final rate increases as these expenses have a direct effect on rates.

The Board has not directed Manitoba Hydro to engage additional expert evidence to determine what, if any, additional drought forecasting options may exist to mitigate the utility's drought risk.

Manitoba Hydro has submitted it is now premature to require expert evidence on this topic as the Utility has additional evidence that it has yet to present on this topic. The Board will determine whether to engage an independent expert consultant, with such a determination expected prior to the Pre-Hearing Conference for Manitoba Hydro's General Rate Application to be filed on November 15, 2022.

The Board finds that Order 9/22 should not be rescinded, changed, altered, or varied. The Board concludes that Manitoba Hydro has not established an error of law, jurisdiction, or fact and has not raised new facts or a change in circumstance which casts substantial doubt on the correctness of Order 9/22.

- 1 (including benefits) associated with the increase in FTEs and an increase for cloud  
2 computing arrangements;
- 3 • No amortization of the Bipole III deferral account in 2024/25 as the regulatory  
4 deferral becomes fully amortized partway through 2023/24; and,
  - 5 • Higher depreciation & amortization of \$10 million in business operations capital  
6 due mainly to capital additions coming into service. For further details, please see  
7 Appendix 3.3 (Amended).

8

## 4.2 Key Inputs and Assumptions

9 Manitoba Hydro based the key inputs and assumptions incorporated into the Amended  
10 Financial Forecast Scenario on a combination of information from internal resources, market  
11 data, and external consultants.

### 4.2.1 Electricity Rates

12 In accordance with Order 137/21, Manitoba Hydro's Amended Financial Forecast Scenario  
13 includes the 3.6% interim electric rate increase approved effective January 1, 2022, which  
14 Manitoba Hydro is requesting confirmation of as part of this Application.

15 The Amended Financial Forecast Scenario projects annual rate increases of 2.0% for nineteen  
16 years, beginning in 2023/24 through to the end of the 20-year planning horizon. Manitoba  
17 Hydro is seeking PUB approval of a 2.0% rate increase effective September 1, 2023 and a  
18 further 2.0% rate increase effective April 1, 2024. The proposed rate increases for 2023/24  
19 and 2024/25 were approved by the Manitoba-Hydro Electric Board ("MHEB") in November  
20 of 2022.

21 The projected rate increases beyond 2024/25 are subject to change in future financial  
22 forecasts. Changes to any of the underlying assumptions contained in the Amended Financial  
23 Forecast Scenario will have an impact on the future results. Rate applications made in future  
24 years will depend upon the circumstances and outlook at the time and will be subject to the  
25 review and approval of the MHEB prior to being submitted to the PUB.

### 4.2.2 Key Economic and Financial Indicators

26 Manitoba Hydro based the economic and financial indicators on a consensus of several  
27 independent sources including Canada's primary financial institutions and several other  
28 independent forecasters. Figure 4.6 below provides the key economic and financial

1 former Chief Financial Officer of BC Hydro and the  
2 former President and CEO of the Northwest Territories  
3 Power Corporation, correct?

4 MS. JAY GREWAL: Correct.

5 MR. BOB PETERS: And in those  
6 positions, Ms. Grewal, would I be correct in  
7 suggesting that you value long-term financial  
8 forecasts for management planning purposes?

9 MS. JAY GREWAL: Yes.

10 MR. BOB PETERS: And, would you also  
11 value long-term financial forecasts for regulatory  
12 purposes?

13 MS. JAY GREWAL: Yes.

14 MR. BOB PETERS: You would have used  
15 those long-term forecasts in those previous positions  
16 at those public utilities.

17 Would that also be correct?

18 MS. JAY GREWAL: Correct.

19 MR. BOB PETERS: And, did you ever  
20 testify at a regulatory hearing in regards to long-  
21 term financial forecasts?

22 MS. JAY GREWAL: No, I have not  
23 testified.

24 MR. BOB PETERS: Not even while you  
25 were at the BC Hydro?

1 MS. JAY GREWAL: No.

2 MR. BOB PETERS: Can you, Ms. Grewal,  
3 succinctly, if possible, tell this Board, what does  
4 Manitoba Hydro believe is the value of a long-term  
5 financial forecast?

6 MS. JAY GREWAL: Long-term financial  
7 forecasts are the monetization of your long-term  
8 financ -- business plan and direction. That's what  
9 financial forecasts are, from my perspective.

10 And the value of that is that it allows  
11 you to then measure and ensure that you're achieving  
12 the financial performance that you anticipated, as  
13 well as ensuring you're achieving the objectives that  
14 were in your Business Plan.

15 It is a governance tool. It's also a  
16 tool that actually helps you understand where what you  
17 intended in your plan is not actually materializing as  
18 anticipated.

19 MR. BOB PETERS: Thank you. Would you  
20 also agree that there's better regulation when a  
21 utility has a long-term financial plan before the  
22 regulator?

23 MS. JAY GREWAL: I agree.

24 MR. BOB PETERS: And, you'd agree  
25 because that, too, would allow the regulator to

1 measure the performance of the utility?

2 MS. JAY GREWAL: Absolutely, as long  
3 as the financial plan is grounded in appropriate data,  
4 and facts, and assumptions that would then cause that  
5 long-term financial forecast to be of value in making  
6 decisions as a regulatory body.

7 MR. BOB PETERS: In your previous  
8 roles with public utilities, Ms. Grewal, were your  
9 financial plans as long as 20 years out?

10 MS. JAY GREWAL: Absolutely, at BC  
11 Hydro.

12 MR. BOB PETERS: Were they longer?

13 MS. JAY GREWAL: I can't recall if it  
14 was longer. Typically, we would look at a five-year  
15 and have a longer-term view and, what I would say,  
16 when I was at BC Hydro, we were also in a state of  
17 transition, because the government at the time had  
18 introduced new energy policy that was having an impact  
19 on -- on the utility.

20 MR. BOB PETERS: And it's common  
21 ground that we don't have a long-term financial  
22 forecast in this interim application, correct?

23 MS. JAY GREWAL: That is correct.

24 MR. BOB PETERS: And you are aware,  
25 are you, that there was no long-term financial

1 forecast back at the 2019/'20 General Rate Application  
2 proceeding?

3 MS. JAY GREWAL: I -- I was not here  
4 at the time, but I understand that was the case --

5 MR. BOB PETERS: No, and I --

6 MR. JAY GREWAL: -- when the filing  
7 was submitted.

8 MR. BOB PETERS: Right, and I  
9 certainly understand, in the sports vernacular, that  
10 both you and Mr. Tess are rookies here, so we'll keep  
11 that in mind.

12 But you are aware that Manitoba Hydro,  
13 before you arrived, Ms. Grewal, was using long-term  
14 financial plans?

15 MS. JAY GREWAL: Yes, I am aware.

16 MR. BOB PETERS: And, the last one  
17 that they filed with this Board was back in -- I guess  
18 was based on 2016 data or was known as the IFF-16,  
19 Integrated Financial Forecast 16?

20 MS. JAY GREWAL: Yes.

21 MR. BOB PETERS: And as Manitoba Hydro  
22 testifies today, Ms. Grewal, Manitoba Hydro does not  
23 have a long-term financial plan. Is that correct?

24 MS. JAY GREWAL: That is correct.

25 MR. BOB PETERS: And we understand

1 that, and your -- your answer to me previously was  
2 that you wanted to make sure that you had the  
3 underlying data to compile a long-range financial  
4 plan, correct?

5 MS. JAY GREWAL: Correct.

6 MR. BOB PETERS: And, as I understand  
7 it, Manitoba Hydro is in the process of developing a  
8 long-range financial plan but, in my words, there are  
9 many dominoes that have to come into place, or pieces  
10 of the puzzle that have to be -- be assembled first.

11 MS. JAY GREWAL: And, there's two (2)  
12 key pieces, or the dominoes, as you refer to them, in  
13 the puzzle.

14 MR. BOB PETERS: And the first -- oh,  
15 I'm sorry. I didn't mean to interrupt.

16 MS. JAY GREWAL: Sorry, that's okay.  
17 The first one is energy policy, because energy policy,  
18 as contemplated by the Province, and they started that  
19 work this fall, engaged consultants, will define the  
20 role of Manitoba Hydro in the evolving energy  
21 landscape, and that will be key in us understanding  
22 the role we play and, therefore, all implications that  
23 has on our business in terms of how we operate today  
24 and how we will operate in the future, and that will  
25 reflect the energy landscape as it is changing, and

1 anticipated to change in Manitoba.

2                   The second key component that will  
3 impact a long-term financial forecast that will be our  
4 best representation of Manitoba Hydro from a financial  
5 perspective in the future is the Integrated Resource  
6 Plan, and this is something Manitoba Hydro has never  
7 undertaken, but it is a best practice, and that work,  
8 we've been planning for it over the last year, and we  
9 kicked off that process in September, through  
10 consultation being the first step, and it will take  
11 eighteen (18) months to complete, and I would also  
12 like to point out that that eighteen (18) months is  
13 the typical time-frame for undertaking an IRP.

14                   Secondly, the IRP that we are  
15 undertaking will not just consider the assets owned by  
16 Manitoba Hydro, but will consider the full evolving  
17 energy landscape, so we can plan according to the  
18 impacts that our customers will have, on both supply  
19 and demand, and then put that into our long-term  
20 financial forecast, that will then be a -- as -- as  
21 robust as we can possibly make it, but those two (2)  
22 factors that I've just spoken to will have a material  
23 impact, and, currently, it's unknown.

24                   MR. BOB PETERS:     But, Ms. Grewal,  
25 Manitoba Hydro can't simply turn off the lights and



1 await the energy policy of the province to do its own  
2 long-term plan, can it?

3 BOARD VICE-CHAIR KAPITANY: Mr.  
4 Peters, can I just ask a question as well?

5 MR. BOB PETERS: Absolutely.

6 BOARD VICE-CHAIR KAPITANY: Yeah,  
7 sorry, I know it's not easy being at your side here,  
8 as opposed to. Thank you for your presentation, Ms.  
9 Grewal.

10 BOARD VICE-CHAIR KAPITANY: Dr. Grant  
11 and I were both members of the Needs For and  
12 Alternatives To Panel back in 2014 and, at that time,  
13 one (1) of our recommendations, which was accepted by  
14 government, was that there should be an integrated  
15 resource plan for Manitoba Hydro.

16 And, so, now, I hear you saying that  
17 you're starting on this process, but it'll be eighteen  
18 (18) months from now before there will be an  
19 Integrated Resource Plan, and I'm -- I guess I'm  
20 having trouble understanding how it can be this long  
21 since the recommendation and the government accepting  
22 it to Manitoba Hydro having what you state as a best  
23 practice. And we believed that at the time and I  
24 agree with you still

25 MS. JAY GREWAL: So I can't speak for

Incremental Increase/(Decrease) from Financial Forecast Scenario																				
Debt Ratio (%)																				
Fiscal Year Ending March 31																				
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
<b>Amended Financial Forecast Scenario</b>	85%	83%	82%	82%	81%	81%	80%	80%	79%	79%	78%	77%	76%	75%	73%	72%	71%	70%	68%	66%
5 Year Drought beginning in 2025/26	0%	0%	0%	1%	3%	4%	5%	6%	6%	7%	7%	7%	7%	8%	8%	8%	8%	8%	9%	9%
7 Year Drought beginning in 2025/26	0%	0%	0%	1%	1%	2%	3%	6%	8%	9%	9%	9%	9%	10%	10%	10%	11%	11%	11%	12%
Above Average Water Flows (2025/26 to 2034/35)	0%	0%	0%	0%	-1%	-1%	-1%	-2%	-2%	-3%	-3%	-4%	-4%	-4%	-4%	-4%	-5%	-5%	-5%	-5%
Below Average Water Flows (2025/26 to 2034/35)	0%	0%	0%	0%	1%	1%	1%	2%	2%	2%	3%	3%	4%	4%	4%	4%	4%	4%	4%	4%
High Electricity Price Forecast Sensitivity	0%	0%	-1%	-1%	-2%	-2%	-3%	-4%	-4%	-5%	-6%	-7%	-7%	-8%	-9%	-10%	-12%	-12%	-14%	-15%
Low Electricity Price Forecast Sensitivity	0%	0%	1%	1%	1%	2%	2%	2%	3%	3%	4%	4%	5%	5%	6%	6%	7%	7%	8%	9%
High Interest Rate Sensitivity	0%	0%	0%	0%	0%	0%	1%	1%	1%	2%	2%	2%	3%	3%	4%	4%	5%	5%	6%	6%
Low Interest Rate Sensitivity	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%	-2%	-2%	-2%	-3%	-3%	-3%	-4%	-4%	-4%	-5%
Business Operations Capex increase by 10% per year	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	2%	2%	2%	2%	3%	3%	3%	4%	4%	5%
Business Operations Capex decrease by 10% per year	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%	-1%	-2%	-2%	-2%	-3%	-3%	-4%	-4%	-5%	-5%
2% Rate Path with Government Fees Unchanged	1%	1%	2%	3%	4%	4%	5%	6%	7%	8%	9%	10%	11%	12%	12%	14%	15%	16%	17%	18%
0% Rate Increase in 2023/24	0%	0%	0%	0%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	3%	3%	3%	4%	4%	4%
0% Rate Increases in 2023/24 & 2024/25	0%	0%	0%	1%	1%	1%	2%	2%	2%	3%	3%	4%	4%	5%	5%	6%	6%	7%	8%	8%
3.6% Interim rolled back on Sept 1/23, 2.0% in 2024/25	0%	0%	1%	1%	1%	2%	2%	3%	3%	4%	5%	5%	6%	7%	7%	8%	9%	10%	11%	12%

Debt Ratio (%)																				
Fiscal Year Ending March 31																				
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
<b>Amended Financial Forecast Scenario</b>	85%	83%	82%	82%	81%	81%	80%	80%	79%	79%	78%	77%	76%	75%	73%	72%	71%	70%	68%	66%
5 Year Drought beginning in 2025/26	85%	83%	82%	83%	84%	85%	85%	86%	86%	85%	85%	84%	83%	82%	81%	80%	79%	78%	77%	75%
7 Year Drought beginning in 2025/26	85%	83%	82%	82%	82%	83%	84%	86%	87%	87%	87%	86%	85%	84%	83%	83%	82%	81%	79%	78%
Above Average Water Flows (2025/26 to 2034/35)	85%	83%	82%	81%	80%	79%	79%	78%	77%	76%	75%	74%	72%	71%	69%	68%	67%	65%	63%	61%
Below Average Water Flows (2025/26 to 2034/35)	85%	83%	82%	82%	82%	82%	82%	81%	81%	81%	81%	80%	79%	78%	77%	76%	75%	74%	72%	71%
High Electricity Price Forecast Sensitivity	85%	83%	81%	80%	79%	78%	77%	76%	75%	74%	72%	71%	69%	66%	64%	62%	60%	57%	54%	52%
Low Electricity Price Forecast Sensitivity	85%	84%	83%	82%	82%	82%	82%	82%	82%	82%	82%	81%	80%	80%	79%	79%	78%	77%	76%	75%
High Interest Rate Sensitivity	85%	83%	82%	82%	81%	81%	81%	81%	81%	80%	80%	80%	79%	78%	77%	77%	76%	75%	74%	73%
Low Interest Rate Sensitivity	85%	83%	82%	81%	81%	80%	80%	79%	78%	78%	76%	75%	74%	72%	70%	69%	68%	66%	64%	62%
Business Operations Capex increase by 10% per year	85%	83%	82%	82%	81%	81%	81%	81%	80%	80%	79%	79%	78%	77%	76%	75%	75%	73%	72%	71%
Business Operations Capex decrease by 10% per year	85%	83%	82%	81%	81%	80%	80%	79%	79%	78%	77%	76%	74%	72%	71%	69%	68%	66%	63%	61%
2% Rate Path with Government Fees Unchanged	86%	85%	84%	84%	84%	85%	85%	86%	86%	87%	87%	87%	87%	86%	86%	86%	86%	85%	85%	84%
0% Rate Increase in 2023/24	85%	83%	82%	82%	81%	81%	81%	81%	81%	80%	80%	79%	78%	77%	76%	75%	75%	73%	72%	71%
0% Rate Increases in 2023/24 & 2024/25	85%	83%	82%	82%	82%	82%	82%	82%	82%	82%	81%	81%	80%	79%	79%	78%	78%	77%	76%	75%
3.6% Interim rolled back on Sept 1/23, 2.0% in 2024/25	85%	84%	83%	83%	82%	83%	83%	83%	83%	83%	83%	83%	82%	81%	81%	81%	80%	79%	79%	78%

g) j) Two alternative rate scenarios for this response have been provided below.

Alternative 1: 3.5% rate increases in 2023/24 & 2024/25; 0.55% rate increases from 2025/26 through 2034/35 (to achieve the 80% debt ratio target); and then 8.5% rate increases from 2035/36 through 2039/40 (to achieve the 70% debt ratio target). This alternative rate scenario results in projected financial losses totaling \$155 million over the five-year period 2030/31 to 2034/35 and a cumulative cash deficit of \$1.249 billion over the ten-year period 2027/28 to 2036/37.

This alternative rate scenario is very similar to what was requested in PUB/MH I-20a. Both of these alternative rate scenarios demonstrate that achieving the 80% debt ratio target by the latest achievement date of March 31, 2035 will likely result in consecutive years of financial losses, cumulative cash deficits and will likely make it not possible to achieve the 70% debt ratio target by March 31, 2040 under an inflationary rate cap of 2%, as prescribed under *The Manitoba Hydro Act*.

Not unlike the rate scenario in PUB/MH I-20a, rate increases post 2034/35 in this scenario will need to exceed the inflationary rate cap of 2% to achieve a 70% debt ratio by March 31, 2040. In order to improve the debt ratio from 80% in 2034/35 to 70% in 2039/40, annual rate increases of 8.5% (4.25 times the projected inflationary rate cap of 2%) would be required from 2035/36 through 2039/40 and would be in violation of the rate cap in *The Manitoba Hydro Act*. Additionally, a requirement for rate increases of 8.5% starting in 2035/36 would not achieve the objective of stable and predictable rates or changes in rates as described in Section 39.1 (1) of *The Manitoba Hydro Act*.

As such, Manitoba Hydro has proposed an alternative rate scenario “*Alternative 2*” below.

Alternative 2: 3.5% rate increases in 2023/24 & 2024/25, followed by 1.55% rate increases from 2025/26 to 2041/42 (to achieve the 70% debt ratio target in 2039/40). The 80% debt ratio target is achieved in 2026/27 in this alternative scenario. This alternative rate scenario results in no financial losses and cash deficits totaling only \$125 million over the planning horizon.



Manitoba Hydro 2023/24 & 2024/25 General Rate Application  
PUB/MH II-7f-g

ELECTRIC OPERATIONS KEY FINANCIAL MEASURES  
PUB/MH II 7g - Rate Scenario Alternative 2

For the year ended March 31

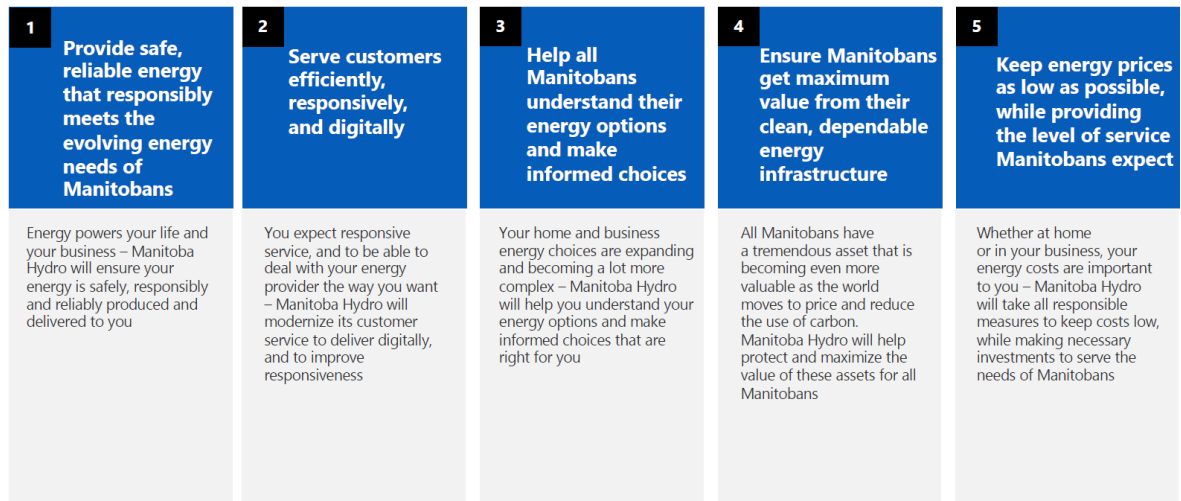
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Annual Rate Increases	0.00%	3.50%	3.50%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%	1.55%
Cumulative Rate Increases	0.00%	3.50%	7.12%	8.79%	10.48%	12.19%	13.93%	15.70%	17.50%	19.33%	21.18%	23.06%	24.97%	26.91%	28.89%	30.89%	32.92%	34.98%	37.08%	39.21%
Net Income/(Loss)	\$751	\$487	\$353	\$203	\$211	\$138	\$126	\$137	\$123	\$179	\$189	\$205	\$249	\$208	\$224	\$231	\$259	\$317	\$358	\$392
Net Income/(Loss) before Net Movement in Reg. Deferral	\$565	\$386	\$282	\$92	\$105	\$83	\$76	\$95	\$128	\$201	\$214	\$238	\$288	\$253	\$274	\$285	\$315	\$374	\$399	\$435
Retained Earnings	\$3 575	\$4 062	\$4 415	\$4 618	\$4 829	\$4 967	\$5 094	\$5 231	\$5 354	\$5 533	\$5 721	\$5 927	\$6 176	\$6 384	\$6 607	\$6 838	\$7 097	\$7 415	\$7 773	\$8 166
Total Equity	\$4 030	\$4 529	\$4 958	\$5 185	\$5 430	\$5 610	\$5 773	\$5 940	\$6 093	\$6 306	\$6 569	\$6 850	\$7 254	\$7 660	\$8 168	\$8 431	\$8 810	\$9 340	\$9 732	\$10 161
Net Debt	\$22 963	\$22 511	\$22 266	\$22 243	\$22 151	\$22 146	\$22 158	\$22 180	\$22 185	\$22 124	\$22 070	\$21 981	\$21 828	\$21 810	\$21 902	\$21 900	\$21 811	\$21 792	\$21 636	\$21 388
Change in Net Debt - Inc/(Dec)	(\$330)	(\$452)	(\$245)	(\$23)	(\$92)	(\$5)	\$12	\$23	\$4	(\$61)	(\$54)	(\$89)	(\$152)	(\$18)	\$92	(\$2)	(\$89)	(\$20)	(\$156)	(\$248)
Cash Provided by Operating Activities	\$1 084	\$1 194	\$940	\$776	\$814	\$808	\$815	\$842	\$895	\$1 001	\$1 035	\$1 083	\$1 157	\$1 140	\$1 185	\$1 230	\$1 302	\$1 387	\$1 450	\$1 529
Cash Used for Investing Activities	(\$774)	(\$711)	(\$708)	(\$741)	(\$725)	(\$803)	(\$827)	(\$865)	(\$898)	(\$937)	(\$977)	(\$989)	(\$1 001)	(\$1 117)	(\$1 271)	(\$1 223)	(\$1 209)	(\$1 361)	(\$1 290)	(\$1 276)
Cash Surplus/(Deficit)	\$310	\$483	\$232	\$35	\$89	\$5	(\$13)	(\$23)	(\$3)	\$63	\$58	\$94	\$157	\$23	(\$86)	\$7	\$94	\$25	\$161	\$253
Self Financing Ratio	140%	168%	133%	105%	112%	101%	98%	97%	100%	107%	106%	109%	116%	102%	93%	101%	108%	102%	112%	120%
Cash Flow to Net Debt	4.7%	5.3%	4.2%	3.5%	3.7%	3.6%	3.7%	3.8%	4.0%	4.5%	4.7%	4.9%	5.3%	5.2%	5.4%	5.6%	6.0%	6.4%	6.7%	7.1%
Net Finance Expense	\$909	\$900	\$885	\$901	\$911	\$919	\$926	\$936	\$937	\$910	\$914	\$916	\$918	\$905	\$896	\$894	\$891	\$878	\$871	\$868
Debt Ratio	85%	83%	82%	81%	80%	80%	79%	79%	78%	78%	77%	76%	75%	74%	73%	72%	71%	70%	69%	68%
Interest Paid	\$1 064	\$834	\$935	\$937	\$935	\$941	\$953	\$968	\$970	\$934	\$944	\$948	\$957	\$950	\$940	\$941	\$932	\$926	\$919	\$912
EBIT Interest Coverage Ratio	1.80	1.53	1.39	1.22	1.23	1.15	1.13	1.14	1.13	1.19	1.20	1.22	1.27	1.22	1.24	1.25	1.28	1.35	1.40	1.44
EBITDA Interest Coverage Ratio	2.48	2.23	2.13	1.98	2.00	1.95	1.95	1.98	2.02	2.15	2.19	2.24	2.32	2.33	2.39	2.45	2.54	2.65	2.74	2.84
Capital Coverage Ratio	2.26	2.26	1.72	1.29	1.28	1.14	1.11	1.09	1.10	1.18	1.16	1.20	1.26	1.22	1.26	1.29	1.33	1.40	1.44	1.49

2

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1 To support the successful execution of Strategy 2040, Manitoba Hydro has developed  
2 five pillars that translate into 16 strategic objectives that will shape our focus for the  
3 next three to five years. For the current year, 21 strategic initiatives associated with  
4 these pillars and objectives have been identified. These are detailed in the Strategy  
5 2040 Overview attached in Appendix 2.1. To translate strategy into execution  
6 Manitoba Hydro uses an enterprise planning process where management is engaged  
7 to develop a coordinated plan. The planning process integrates business unit plans  
8 vertically and horizontally within the enterprise. The goal is to provide clear direction,  
9 reflecting the priorities of Strategy 2040. Management captures details of the plan in  
10 a document called “Manitoba Hydro’s Enterprise Plan 2022/23”, a copy of which is  
11 attached in Appendix 2.2.

**Figure 2.2 Strategic Pillars of Strategy 2040**



12 The strategic pillars and objectives are organized within Strategy 2040 as follows:

Strategy 2040 Pillar	Strategic Objectives
<p><b>Pillar 1</b> - Provide safe, reliable energy that responsibly meets the evolving energy needs of Manitobans</p>	<ol style="list-style-type: none"> <li>1. Ensure sufficient supply of energy to meet demand in the Province of Manitoba</li> <li>2. Ensure energy is safely, efficiently, and reliably delivered for our customers</li> <li>3. Strengthen our role as a good corporate and environmental citizen, continuing to advance relationships with stakeholders and Indigenous Peoples</li> </ol>

Strategy 2040 Pillar	Strategic Objectives
<b>Pillar 2</b> - Serve customers efficiently, responsively, and digitally	<ol style="list-style-type: none"> <li>1. Continually redefine how Manitoba Hydro engages and serves Manitobans</li> <li>2. Develop and implement an integrated customer strategy / customer experience</li> <li>3. Be responsive to customers' current and evolving expectations</li> </ol>
<b>Pillar 3</b> - Help all Manitobans understand their energy options and make informed choices	<ol style="list-style-type: none"> <li>1. Support the Province of Manitoba in the development and effective implementation of an Energy Policy</li> <li>2. Assist Manitobans to understand and navigate their expanding energy choices</li> <li>3. As stewards, maximize the benefit of existing energy infrastructure, owned by Manitobans</li> <li>4. Within the parameters of Energy Policy, coordinate with new energy players to ensure costs and benefits of new energy assets are balanced for all Manitobans</li> </ol>
<b>Pillar 4</b> - Ensure Manitobans get maximum value from their clean, dependable energy infrastructure.	<ol style="list-style-type: none"> <li>1. Leverage Manitoba's clean dependable electricity to support the Province's economic development objectives</li> <li>2. Support the Province of Manitoba in achieving GHG targets</li> <li>3. Maximize the value of surplus energy</li> </ol>
<b>Pillar 5</b> - Keep energy prices as low as possible, while providing the level of service Manitobans expect	<ol style="list-style-type: none"> <li>1. Responsibly manage all costs (deferring and minimizing where appropriate)</li> <li>2. Where beneficial to Manitoba and Manitobans, leverage opportunities to access capital to finance new investments and optimize debt.</li> <li>3. Transform business model and culture to deliver our strategy</li> </ol>

## 2.4 Realigning Our Business Model to Enable the Execution of Strategy 2040

- 1 Through the long-term strategic planning process, it became clear that disruptive
- 2 forces are reshaping the utility industry and changing customer behaviours and
- 3 expectations. Manitoba Hydro has realigned its organizational structure to effectively
- 4 respond to this future. Traditionally, Manitoba Hydro was organized around functional

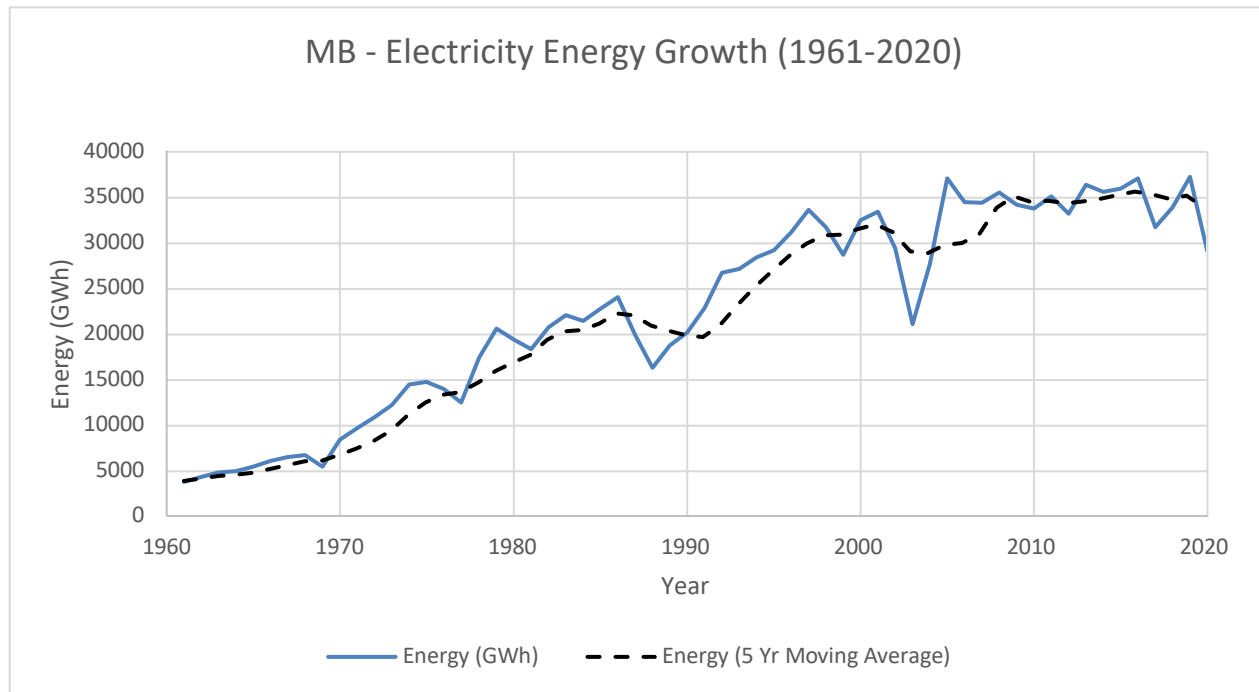


## 4 FLATTENING DEMAND GROWTH TRAJECTORY

The “clear benefit” of building excess generation that was recognized by Manitobans more than sixty years ago was recognized during a time of massive electrical system growth. Electrical system growth rates that were more than an order of magnitude larger than recent Manitoban electrical energy growth rates over the past 20 years.

As shown in Figure 1, from 1961 to 2020, electrical growth in Manitoba increased at a rapid and sustained pace until the mid-1980’s when electrical energy growth experienced a major decline that appears to have recovered by the early 1990’s. Electrical energy from the early 1990’s to 2020 showed significantly reduced growth rates compared to the pre-1985 period with the growth from 2005 to 2020 being near zero<sup>9</sup>. Installed capacity (i.e., generation nameplate capacity) also follows a similar pattern as energy generation for the period from 1961 to 2020 without the major dips in growth in the late 1980s and early 2000s as shown in Figure 2.

**Figure 1: Manitoba – Energy Growth (1961 to 2020)<sup>10</sup>**



<sup>9</sup> Although the electrical energy growth from 2005 to 2020 is significantly negative due to low energy in 2020, excluding 2020 shows that energy growth from 2005 to 2019 was near zero (37049 GWh in 2005 to 37524 GWh in 2019), a Compound Annual Growth Rate of only 0.04% (i.e. near zero).

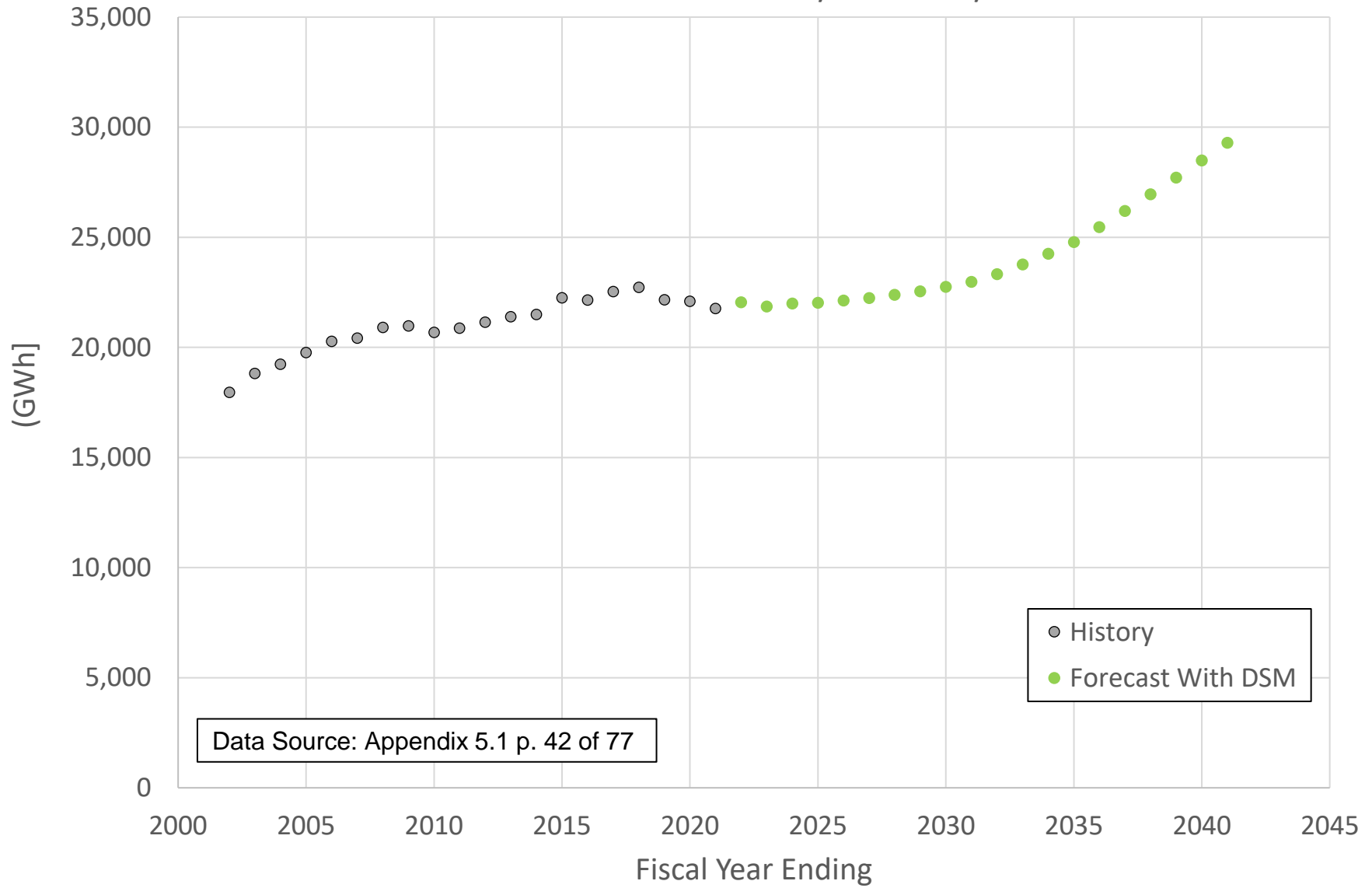
<sup>10</sup> **Source:** Government of Canada, Statistics Canada, Energy Section, Electric power generation, transmission and distribution. Please refer to the attached .xlsx file for reference. *P0649-D012-MDL-R00-EXT - Midgard Evidence - Calculation Workbook.xlsx*.

The following table outlines historical and forecast details including the impacts of program-based Demand Side Management activity:

Table 11 – General Consumers Sales

General Consumers Sales (GWh)			
Historical / Weather Adjustment			
Fiscal Year	Sales	Weather Adjust	Adjusted Sales
2001/02	17,805	158	17,963
2002/03	19,246	(426)	18,820
2003/04	19,280	(41)	19,239
2004/05	19,735	26	19,761
2005/06	19,935	343	20,278
2006/07	20,510	(85)	20,425
2007/08	21,061	(155)	20,906
2008/09	21,210	(230)	20,980
2009/10	20,486	197	20,683
2010/11	20,786	93	20,879
2011/12	20,771	374	21,144
2012/13	21,477	(85)	21,391
2013/14	22,338	(840)	21,498
2014/15	22,458	(211)	22,247
2015/16	21,654	497	22,151
2016/17	22,025	510	22,536
2017/18	22,573	155	22,728
2018/19	22,848	(691)	22,157
2019/20	22,078	16	22,093
2020/21	21,762	10	21,771
Forecast / Forecast less DSM			
Fiscal Year	Forecast	DSM (Program based)	Forecast less DSM
2021/22	22,320	(275)	22,045
2022/23	22,306	(448)	21,858
2023/24	22,580	(587)	21,993
2024/25	22,789	(767)	22,022
2025/26	23,065	(939)	22,126
2026/27	23,352	(1,111)	22,240
2027/28	23,670	(1,287)	22,383
2028/29	24,006	(1,455)	22,551
2029/30	24,371	(1,626)	22,745
2030/31	24,774	(1,795)	22,978
2031/32	25,282	(1,952)	23,330
2032/33	25,903	(2,136)	23,767
2033/34	26,588	(2,333)	24,255
2034/35	27,312	(2,533)	24,779
2035/36	28,084	(2,621)	25,464
2036/37	28,907	(2,708)	26,199
2037/38	29,759	(2,804)	26,955
2038/39	30,639	(2,923)	27,716
2039/40	31,558	(3,071)	28,486
2040/41	32,503	(3,214)	29,289

### PUB ADVISOR DOCUMENT General Consumer Sales - 2001/02 - 2040/41



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**MINISTER  
OF Crown Services**

Room 314  
Legislative Building  
Winnipeg, Manitoba CANADA  
R3C 0V8

April 24, 2019

Ms. Marina James, Chair  
Manitoba Hydro Electric Board  
22<sup>nd</sup> Floor, 360 Portage Ave.  
Winnipeg, MB R3C 0G8

Dear Ms. James:

Manitobans have elected a government that is committed to improving the province of Manitoba. Our priorities include restoring prudent fiscal management, creating jobs, improving health care and education, improving our partnerships and relationships with business, communities and indigenous Manitobans, and increasing openness and transparency of our government. We are focused on achieving results on behalf of all Manitobans.

The Government of Manitoba has entrusted you and your Board to oversee the strategic operation of Manitoba Hydro. This letter is an update to a previous letter and serves to set out our expectations for you.

First and foremost, Manitoba Crown corporations are part of our government family, and must align with our government's mandate to fix our finances, repair our services and rebuild our economy. As referenced in our Ministerial mandates, **the old way of doing things, where government just got bigger and more expensive is over.**

Crown corporations finances are consolidated in Government's summary statements and we are moving towards a "whole of government" approach to budget processes. Fluctuations in your net income impact our net income on a dollar-for-dollar basis, and thus help or hinder our efforts to move towards balance. All Manitobans expect that you deliver your important services in a fiscally sustainable, predictable, transparent and reliable manner.

In the coming year, we will be taking more steps to fully integrate Crown corporations into our summary budget process. This may affect the timing of budget processes and other financial

matters. I am seeking your support in ensuring accurate, timely financial reporting to government, in particular your vigilance in providing clear and early notice of significant variances to budgets, or changes to your medium and long term forecasts. Please continue to work with Crown Services Secretariat and Treasury Board Secretariat to strengthen alignment with government overall.

The province's efforts to achieve fiscal sustainability requires all of us to work together. In the past, our Crown corporations have struggled to properly manage their costs and strayed outside of their mandates. We expect you to scrupulously manage all operating costs, defer all non-critical capital projects without a clear return on investment, and carefully examine business plans for opportunities to achieve improved financial results. We also expect the Board to carefully examine overall staffing efficiencies. Centrally, we have reduced overall management by over 15%, conducted a “spans and layers” review of management structures, and reduced overall headcount by 8%. We expect you to work towards the same, or more.

In addition, we ask you to review all compensation agreements, including executive compensation practices and interchange agreements to ensure alignment with government policies and practices. The expectation is that compensation practices will reflect the principles of responsible fiscal management and protect the sustainability of services to customers and ratepayers.

We have a strong interest in reducing red tape for all Manitobans. As a Crown, we ask that you integrate the red-tape reduction process and reporting into your Board processes – whether by way of a new Committee or regular reporting mechanisms.

We ask that you limit advertising to responsible mandate focused advertising considered essential for you to successfully perform your core business and continue to work with Government on the alignment of all sponsorship activities with central government.

We also ask that you assume ownership and leadership in respect of our following priorities for you:

- Support the implementation of Efficiency Manitoba to ensure a smooth transition of Demand Side Management programs for Manitoba Hydro customers.
- Cooperate with the inquiry into the development of the Keeyask Generating Station and the Bipole III transmission line and converter stations.
- Work closely with the Province (through Crown Services Secretariat and Treasury Board Secretariat) in respect of any new long-term contractual commitments, including any potential long-term electricity sale arrangements, to ensure return on investment.
- Pursue opportunities with the federal government and other provinces to advance climate change initiatives, including the potential development of an East-West Grid and work with our Intergovernmental Affairs department on opportunities to leverage financial partnerships with the federal government.
- Work with the province on implementing the provincial economic development strategy focused on maximizing economic spinoffs for Manitoba, creating new revenues for Manitoba



Hydro and mitigating the need for future rate increases for customers or less profitable sales outside of Manitoba on the spot market.

- Work with the Public Utilities Board to streamline processes, in an effort to reduce overall costs to ratepayers of regulatory hearings.

Government is committed to advancing reconciliation with Indigenous Manitobans through the renewal of its consultation framework to ensure respectful and productive consultations. All government organizations are expected to contribute to reconciliation in their interactions with Indigenous communities and individuals.

I have also been tasked to achieve more open government through increased transparency in tendering and procurement practices. All Crown corporations should ensure their procurement practices reflect this priority and are aligned with the requirements of trade agreements to which Manitoba is a signatory. In Government, we are centralizing our procurement practices and we urge you to pro-actively join us in this process so that we can shop smarter for all Manitobans.

Government is committed to ensuring all employees are treated with dignity and respect. Respectful workplace policies need to be reviewed and updated to ensure employees have safe and effective pathways to report disrespectful or harassing behaviour without fear of repercussion.

It is my expectation these priorities and initiatives, in addition to those included in your business plan, will be reported on in your 2019/20 Annual Report.

I know you and your colleagues on the Board understand that it is an important responsibility to guide and oversee Manitoba's publicly owned corporations. I know I can count on your hard work and dedication to fulfill your Board's duties and responsibilities. I look forward to hearing your advice and recommendations and to working together on achieving results that will make Manitoba the Most Improved Province and I sincerely thank you for taking on this role and for your dedication and efforts.

Respectfully,

Colleen Mayer  
Minister

**REFERENCE:**

Coalition/MH I-83 a, PUB/MH I-71 a c

**PREAMBLE TO IR (IF ANY):**

MH was requested in Coalition/MH I-83 a) to provide a continuity schedule of straight time FTE's by division from 2019/20 to 2024/25 and provide variance explanations. MH provided the continuity schedule by division in the response to Coalition/MH I-83 a) but referenced to the response to PUB/MH 71 a) for variance explanations that were provided only at the business unit level (and not division level). As a result of the variance thresholds selected by MH in the response to PUB/MH 71 a) a significant portion of the year to year variances in FTE's are not explained in that IR.

**QUESTION:**

Please confirm (or adjust as necessary) (i) the following FTE changes by business unit and division between 2019/20 to 2024/25 (Coalition/MH I-83 a) and (ii) the following variance explanations that have been inferred through the information on the record to date:

- a) President & CEO (CEO) business unit FTE increase is 13, primarily in the Enterprise Excellence division – primarily due to strategic initiatives associated with Strategy 2040;
- b) Digital & Technology (D&T) business unit FTE increase is 24, primarily in the VP Digital & Technology division – primarily due to initiatives associated with cyber security and digital transformation;
- c) Human Resources & Safety, Health & Environment (HRSHE) business unit FTE increase is 50, primarily in the HR and SHE divisions – primarily due to strategic initiatives associated with the business model review in HR and the filling of vacancies in SHE;
- d) Chief Financial Officer (CFO) business unit FTE increase is 20, primarily in the Corporate Controller, Strategy & Enterprise Planning and Rates & Regulatory divisions – primarily due to strategic initiatives associated Strategy 2040 and filling of vacancies;
- e) External & Indigenous Relations & Communications (EIRC) business unit FTE increase is 9, with 2 to 3 FTE increases in each of the four divisions – please provide an overall variance explanation for these changes;

- f) Customer Solutions & Experience (CSE) business unit FTE decrease is 8 – primarily as a result of the transfer of staff from the Sales, Marketing & Product Development division to Efficiency Manitoba in 2020/21 and mostly **offset by increases in Customer Strategy & Experience and Customer Care divisions** as a result of initiatives with respect to customer experience and journey;
- g) Asset Planning & Deliver (APD) business unit and Operations business unit FTE change is a net decrease of 11 – primarily as a result of the in-service of major capital projects and vacancies, mainly offset by increases in Trade Trainees that have been consolidated in the Operations business unit;
- h) The total FTE increase from the governance and corporate service business units (CEO, D&T, HRSHE, CFO and EIRC) is 116, partially offset by decreases of 19 FTE’s in the CSE/APD/Operations business units, for a net increase of 97 FTE’s from 2019/20 to 2024/25.
- i) The response to PUB/MH I-71 c) provide an analysis of FTE’s by business unit from 2021/22 to 2024/25 with a breakdown between management, technical/professional, clerical, student/interim and vacancy. Please provide (i) a comparison of the number of management positions in 2021/22 and 2024/25 by business unit (ii) the titles of the additional management positions in each business unit and (iii) an analysis of the increase in costs as a result of these additional management positions similar to the analysis provided in the response to Coalition/MH I-4 c).

**RESPONSE:**

- a) **Confirmed** that the Enterprise Excellence division is the primary driver of the FTE increase in the President & CEO business unit. For further clarification, as outlined in Section 2.4.1, Tab 2 of the Application, this division focuses on embedding change management, continuous evaluation and improvement, and alignment to strategy.
- b) The increase in FTEs in the Digital & Technology (“D&T”) business unit is **24** and is **primarily due to building out the business unit to support Strategy 2040 and execution of the D&T roadmap**, and filling of certain vacancies. Changes between divisions are driven by the business model realignment.

- c) The increase in FTEs in the Human Resources & Safety, Health & Environment (HR&SHE) business unit is 50. The increase is due to filling vacancies in both the Human Resource and Safety, Health & Environment divisions and supporting strategic initiatives associated with the business model review and realignment.
- d) The increase of 20 FTEs in the Chief Financial Officer (CFO) business unit between 2019/20 Actual and 2024/25 Preliminary Budget is primarily due to strategic initiatives associated with Strategy 2040 and filling vacancies in the Strategy & Enterprise Planning and Enterprise Risk Management divisions. These divisions were moved into the CFO business unit as part of the business model review, along with Manitoba Hydro International Ltd. staff into the Corporate Controller Division which are also contributing to the FTE increase.
- e) The increase of 9 FTEs in External & Indigenous Relations & Communications is as follows: the 3 FTEs in VP External & Indigenous Relations and Communications are due to the creation of the Stakeholder Relations department with three positions; two new and one which was a transfer. The increase of 2 FTEs in Indigenous & Community Relations are due to filling vacancies. The increase of 2 FTEs in Corporate Communications and 2 FTEs in General Council & Corporate Secretary are related to the integration of staff from Manitoba Hydro International Ltd. into Manitoba Hydro. The third FTE in General Council & Corporate Secretary is due to the addition of a Chief Privacy Officer.
- f) Confirmed.
- g) Confirmed.
- h) Confirmed.
- i)  
(i) and (ii) Please see the table below for a comparison of the FTEs identified in 2021/22 and 2024/25 for management positions. Please note that Manitoba Hydro's reporting system tracks FTEs (not positions). A manual review of management positions was performed to provide the change in the number of management

positions from 2021/22 to 2024/25 by Business Unit and are identified in the column “Position Change”.

In 2021/22, many management positions were vacant through the fiscal year resulting in a lower FTEs amount than actual positions. There will presumably be changes in 2024/25, such as vacancies in those positions at some point through the year that will ultimately result in a lower actual FTE amount but, as that is not yet known and the vacancy factor is not applied in this view, the FTE totals in 2021/22 to 2024/25 are not comparable.

Please also note that through the business model realignment, there were changes to existing management positions combined with the creation of new positions. As a result, there is not always an obvious new position title that can be identified as duties of an existing manager position may have changed to allow for new business requirements and a component of an existing management position may have shifted to a new position. Examples of this are in the Human Resource & Safety, Health and Environment and the Digital & Technology business units and, as such, position titles are not able to be provided in the explanation below.

Business Units	2021/22	2024/25		Position Change	Reference
	Actual FTE	Preliminary Budget FTE	FTE Change		
President & CEO	9	12	3	3	1
Customer Solutions & Experience	14	16	2	-	
Asset Planning & Delivery	37	37	-	-	
Operations	36	36	-	-	
Digital & Technology	7	15	8	2	2
HR & Safety, Health and Environment	8	11	3	2	3
Chief Financial Officer	23	27	4	1	4
External & Indigenous Relations and Comm	8	9	1	-	
<b>Business Unit Total</b>	<b>142</b>	<b>163</b>	<b>21</b>	<b>8</b>	

Reference	Explanation
1	Three new managers were added to the newly formed Enterprise Excellence Division: Enterprise Alignment Department Manager, Enterprise Improvement Department Manager and Enterprise Enablement Change Department Manager
2	Two new manager positions resulting from the Business Model realignment
3	Two new manager positions resulting from the Business Model realignment
4	Increase is related to a move to the Corporate Controller Division from Manitoba Hydro International

(iii) Please see the table below that shows the change in costs as a result of the additional management positions provided in (i) and (ii) above. While the total wages for all management positions is increasing (recognizing that 2024/25 information assumes all vacant positions will be filled and there will be no vacancies throughout the year as the table does not incorporate a vacancy factor), the average wages per management position is slightly lower from 2021/22 to 2024/25. This is primarily due to the attrition of employees that were at the top of their pay grades, as well as some of the new management positions added being in a lower classification.

	2021/22 Actual Wages	2021/22 Actual Average Wages	2024/25 Preliminary Budget Wages	2024/25 Preliminary Budget Average Wages	Change in Wages	Change in Average Wages
Management	\$ 22,134,129	\$ 156,236	\$ 25,190,159	\$ 154,501	\$ 3,056,030	\$ (1,735)

## 6 Operating & Administrative Expenses

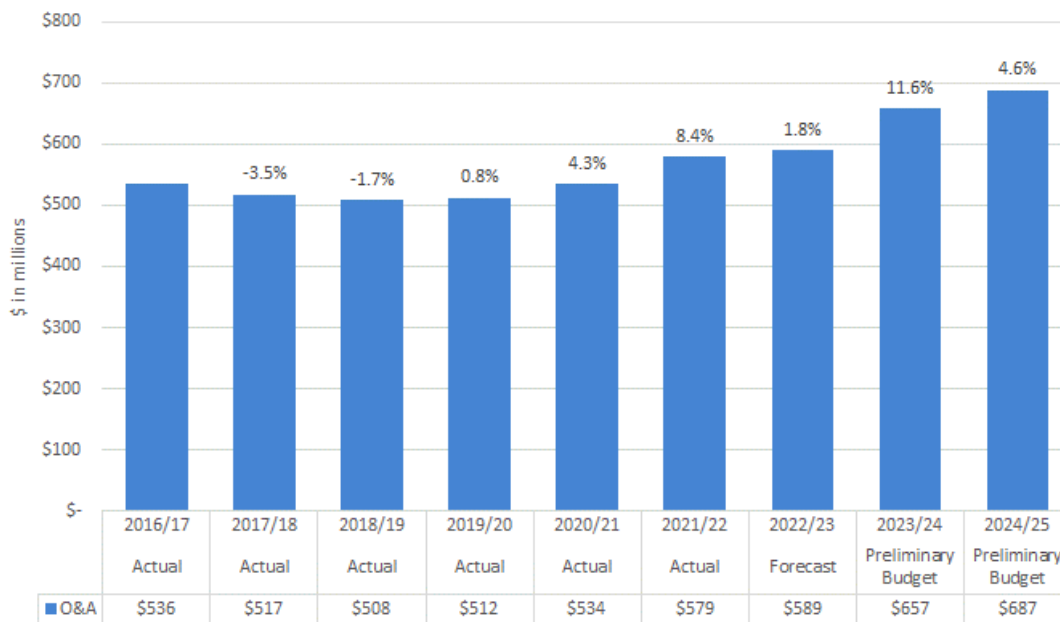
### 6.1 Summary

1 Manitoba Hydro is preparing for the changing energy landscape, ensuring that it meets its  
2 core mandate and serves its customers in a safe and reliable way, while keeping costs as low  
3 as possible.

4 Customers’ expectations are evolving due to the rapidly changing digital world, and Manitoba  
5 Hydro needs to evolve to meet these new expectations. This includes taking a customer-  
6 centric service approach by prioritizing simplicity, ease, convenience, responsiveness,  
7 reliability, and security.

8 Operating and Administrative (“O&A”) expenses are forecasted at levels required to ensure  
9 that Manitoba Hydro can maintain its electric system to provide reliable service and is able  
10 to meet the current and future needs of customers. In response to this, O&A expenses are  
11 increasing in the Test Years, as illustrated in Figure 6.1 below.

**Figure 6.1 O&A Expenses, 2016/17 – 2024/25**



12

13 Manitoba Hydro remains committed to effectively managing its costs and has made  
14 concerted efforts to reduce O&A expenses; however, given the current environment - both  
15 internal and external to Manitoba Hydro - there has been a shift from cost savings to



# M A N I T O B A

## O R D E R I N C O U N C I L

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DATE: **November 16, 2022**

ORDER IN COUNCIL NO.: **402/2022**

RECOMMENDED BY: **Minister responsible for The Manitoba Hydro Act**

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### ORDER

1. Approval is given to the minister responsible for *The Crown Corporations Governance and Accountability Act* (the “Minister”) to issue a directive to The Manitoba Hydro Electric Board in the form attached at Schedule “A”.
2. This Order comes into effect on the day that it is made.

### AUTHORITY

*The Crown Corporations Governance and Accountability Act*, C.C.S.M. c. C336, states:

#### **Directives**

13(1) The minister may — with the approval of the Lieutenant Governor in Council — issue a directive to a corporation

- (a) respecting matters of policy;
  - (a.1) requiring the corporation to conduct an organizational review as specified in the directive;
  - (a.2) requiring the corporation to do something in accordance with its approved annual business plan or prohibiting it from doing anything inconsistent with that plan;
- (b) to ensure that practices of two or more corporations are consistent; and
- (c) to ensure that two or more corporations act in concert with each other or with government departments or agencies when doing so will further efficiency and effectiveness.

...

#### **Compliance**

13(3) A corporation must comply with a directive given under this section.

#### **Directives to be made public**

13(4) The minister must make a directive public, in a manner he or she determines reasonable, within 30 days of the directive being given to the corporation.

### BACKGROUND

1. The Minister recommends that the attached directive be issued to The Manitoba Hydro Electric Board.



**A Directive to  
Manitoba Hydro Electric Board  
Respecting Electric Service to Cryptocurrency Operations**

**Issued by: Honourable Minister Cameron Friesen**

**Effective: November 16, 2022**

## BACKGROUND

The *Crown Corporations Governance and Accountability Act* provides for the issuing of directives to one or more Crown corporations as follows:

### Directives

13(1) The minister may — with the approval of the Lieutenant Governor in Council — issue a directive to a corporation

- (a) respecting matters of policy;
- (a.1) requiring the corporation to conduct an organizational review as specified in the directive;
- (a.2) requiring the corporation to do something in accordance with its approved annual business plan or prohibiting it from doing anything inconsistent with that plan;
- (b) to ensure that practices of two or more corporations are consistent; or
- (c) to ensure that two or more corporations act in concert with each other or with government departments or agencies when doing so will further efficiency and effectiveness.

## PURPOSE

Manitoba Hydro is expecting unprecedented demand for electricity from persons intending to engage in cryptocurrency operations.

This directive instructs Manitoba Hydro to temporarily suspend the processing of requests for electric service intended to be used for the purpose of operating computer equipment dedicated to cryptographic calculations which, in particular, serve to validate successive transactions made by users of a blockchain, known as “cryptocurrency operations”, pending the implementation of this directive.

## APPLICATION AND SCOPE

This directive applies to:

- requests for electric service received by Manitoba Hydro which have not resulted in the execution of either an agreement to construct infrastructure or an agreement to supply electric service; and
- new requests for electric service;

from persons intending to engage in cryptocurrency operations.

The suspension shall be applied until April 30, 2024.

## DIRECTIVE

Manitoba Hydro is directed:

- (a) to suspend processing of requests for electric service previously received from persons intending to engage in cryptocurrency operations until April 30, 2024;
- (b) to suspend processing of any new requests for electric service from persons intending to engage in cryptocurrency operations until April 30, 2024;
- (c) to provide a refund of any deposits held by Manitoba Hydro to any persons whose request for electric service is subject to the suspension;
- (d) to maintain a record of the dates upon which each of the persons whose request for interconnection is subject to the suspension submitted their request for interconnection;
- (e) to undertake a review of the impact on the hydroelectric system of the anticipated demand for electricity from persons intending to engage in cryptocurrency operations, including consideration of:
  - i. potential effects of the anticipated demand for electricity from persons intending to engage in cryptocurrency operations on Manitoba Hydro's ability to serve other customers and fulfill Manitoba Hydro's legislated mandate; and
  - ii. potential need for new generating resources to meet demand for electricity, including from persons intending to engage in cryptocurrency operations;
- (f) in undertaking the review, to consult with stakeholders, including persons intending to engage in cryptocurrency operations;
- (g) to collaborate with government, through Manitoba Finance, with respect to the development of Manitoba's energy policy and economic development policy as it relates to cryptocurrency operations;
- (h) to engage with The Public Utilities Board regarding regulatory perspectives, if any, on appropriate mechanisms to address the anticipated demand for electricity from persons intending to engage in cryptocurrency operations;
- (i) to provide to government options and recommendations to address anticipated unprecedented demand for electricity from persons intending to engage in cryptocurrency operations.

WORKING FOR YOU

([HTTPS://WWW.HYDRO.MB.CA/ARTICLES/CATEGORIES/WORKING\\_FOR\\_YOU/](https://www.hydro.mb.ca/articles/categories/working_for_you/))

## Province directs Manitoba Hydro to pause new cryptocurrency connections

On November 28, [the Government of Manitoba announced](https://www.gov.mb.ca/asset_library/en/proactive/20222023/directive-mb-hydro-crypto-11-16-22.pdf) ([https://www.gov.mb.ca/asset\\_library/en/proactive/20222023/directive-mb-hydro-crypto-11-16-22.pdf](https://www.gov.mb.ca/asset_library/en/proactive/20222023/directive-mb-hydro-crypto-11-16-22.pdf)) they have directed Manitoba Hydro to pause new cryptocurrency interconnection requests. As per the Province, unchecked cryptocurrency mining could require us to spend billions in new generation and transmission facilities — so urgent action is required to respond to the exponential number of requests we're getting.

As a result of the directive, effective immediately, we are:

- Pausing all new requests for service to cryptocurrency operations.
- Providing security deposit refunds to anybody whose request for electric service is subject to the suspension.
- Beginning a full review of the potential impacts of the cryptocurrency industry on the hydroelectric system and providing the Manitoba government with options and recommendations to address the anticipated demand. This includes:
  - Consulting with stakeholders, including those planning to engage in cryptocurrency operations;
  - Collaborating with Manitoba Finance on the new policy and how it relates to economic development; and
  - Engaging with the Public Utilities Board to explore any potential regulations that may be introduced to guide cryptocurrency operations.

“This pause will provide us the time to assess the impact of the crypto industry on our system and how it fits within the evolving energy landscape through our Integrated Resource Plan,” said **Jay Grewal** (President & CEO).

Cryptocurrency mining uses arrays of powerful computers to do complex math calculations, which requires a significant amount of power — these computers, along with their cooling equipment, need to be plugged in and running at all times. There are 37

cryptocurrency customers in Manitoba, but over 240 potential new operations have been in touch with us since July 2021. Many other utilities are facing similar challenges, and we brought forward the potential issues the cryptocurrency industry poses earlier this year.

“We must ensure the long-term impacts are clearly understood and don’t inadvertently affect our other customers, whether they’re residential, commercial, or industrial,” said Jay. “We always act in the best interests of all Manitobans. If we connected every cryptocurrency operator who’s shown interest in the last 16 months, we’d increase our total electrical load by 4,600 megawatts.”

For comparison, Manitoba Hydro’s total system capacity is approximately 6100 megawatts.

BC Hydro is considering a similar approach, with a potential moratorium on providing power to the crypto industry for 18 months while the BC government considers its options. In November 2022, Hydro-Quebec asked the provincial regulator to suspend the current allocation for the cryptocurrency industry, saying it would increase pressure on current power balances.

**A Directive to**  
**Manitoba Hydro Electric Board**  
**Respecting Manitoba's Response to the Economic Review of**  
**Manitoba Hydro- Keeyask and Bipole III Projects**

**Issued by: Honourable Minister Jeff Wharton**

**Effective: \_\_\_\_\_**

## BACKGROUND

The *Crown Corporations Governance and Accountability Act* provides for the issuing of directives to one or more Crown corporations as follows:

- 13(1) The minister may — with the approval of the Lieutenant Governor in Council — issue a directive to a corporation
- (a) respecting matters of policy;
    - (a.1) requiring the corporation to conduct an organizational review as specified in the directive;
    - (a.2) requiring the corporation to do something in accordance with its approved annual business plan or prohibiting it from doing anything inconsistent with that plan;
  - (b) to ensure that practices of two or more corporations are consistent; or
  - (c) to ensure that two or more corporations act in concert with each other or with government departments or agencies when doing so will further efficiency and effectiveness.

## PURPOSE

This directive provides instruction to Manitoba Hydro to support development and implementation of Manitoba's response to the 51 recommendations outlined in Commissioner Brad Wall's report on the Economic Review of Manitoba Hydro- Keeyask and Bipole III Projects.

## APPLICATION AND SCOPE

This directive applies to the work of the assigned provincial project team and external panel in developing a formal response to the recommendations outlined in Commissioner Wall's report.

Scope of work to be supported by Manitoba Hydro includes, assessment of the 51 recommendations from the report, determination of an action plan for each, including stakeholder engagements, ongoing evaluation processes and prescribed reporting mechanisms, and implementation activities, where applicable.

## DIRECTIVE

Manitoba Hydro is directed to take all steps necessary to support the work of the assigned provincial project team and external expert panel in developing Manitoba's formal response to recommendations outlined in Commissioner Brad Wall's report on the Economic Review of Manitoba Hydro- Keeyask and Bipole III Projects.

Manitoba Hydro will support the assigned project team and external expert panel in conducting their assessment of the 51 recommendations from the report, development and implementation of required action plans, and required reporting mechanisms as determined by Government.



4

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# 1. 2022 Supply/Demand Scenario Winter Peak Capacity Supply & Demand Table

System Firm Winter Peak Demand and Capacity Resources (MW)																				
2022 Supply/Demand Scenario																				
Fiscal Year	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42
<b>Supply</b>																				
<b>New Power Resources</b>																				
1 Total New Hydro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 Total New Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	223	446	446	668
3 Total New Wind	0	0	0	0	0	0	0	0	0	0	0	20	40	80	115	127	127	153	161	161
4 Total New Non-Utility Generation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Total New Power Resources <small>1+2+3+4</small>	0	0	0	0	0	0	0	0	0	0	0	20	40	80	115	127	350	599	607	829
<b>Base Supply Power Resources</b>																				
Existing and Committed Hydro	5768	5768	5768	5791	5842	5852	5852	5830	5830	5830	5830	5830	5830	5830	5830	5830	5830	5830	5830	5830
Existing Thermal	278	278	278	278	278	278	278	278	278	278	278	278	278	278	278	278	278	278	278	278
Existing Non-Utility Generation	52	52	52	52	31	31	31	31	31	31	31	31	31	31	28	28	28	0	0	0
Supply Side Enhancements	0	0	0	0	25	25	25	25	25	62	126	163	226	264	264	264	264	264	264	264
Scheduled Outages	-135	-135	-135	-150	-150	-150	-150	-150	-250	-250	-250	-250	-250	-250	-150	-150	-150	-150	-150	-150
Contracted Imports	600	600	600	250	250	200	200	200	0	0	0	0	0	0	0	0	0	0	0	0
6 Total Base Supply Power Resources	6563	6563	6563	6221	6251	6236	6236	6214	5914	5951	6015	6052	6116	6253	6249	6249	6249	6222	6222	6222
7 Total Power Resources @ Point of Supply <small>5+6</small>	6563	6563	6563	6221	6251	6236	6236	6214	5914	5951	6015	6072	6156	6333	6364	6376	6599	6820	6828	7051
<b>Demand</b>																				
2021 Electric Load Forecast	4569	4629	4681	4738	4800	4869	4943	5023	5112	5219	5351	5498	5654	5822	6003	6190	6385	6590	6802	6992
2020 Efficiency Manitoba Demand Side Management Forecast	-105	-140	-187	-229	-277	-329	-378	-431	-485	-536	-599	-664	-734	-770	-806	-847	-896	-956	-1016	-1076
2021 Curtailable Rate Program Option A Forecast	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162	-162
Demand Response	0	0	0	0	0	0	-39	-80	-121	-124	-134	-141	-141	-141	-141	-142	-122	-119	-116	-116
Manitoba Net Load @ Common Bus	4302	4327	4332	4347	4361	4378	4364	4349	4344	4397	4455	4530	4617	4749	4893	5039	5206	5353	5508	5638
Manitoba Transmission Losses	228	230	230	230	229	230	232	236	242	248	248	254	260	269	280	295	299	303	320	323
8 Manitoba Net Load @ Point of Supply	4530	4557	4563	4577	4589	4608	4596	4585	4586	4644	4703	4784	4877	5018	5174	5334	5505	5656	5828	5961
Contracted Exports	1166	1222	1227	837	837	742	666	671	565	565	565	565	565	315	315	315	315	315	215	215
Total Exports @ Border	1166	1222	1227	837	837	742	666	671	565	565	565	565	565	315	315	315	315	315	215	215
Export Transmission Losses	58	65	66	61	61	56	48	49	61	62	62	64	66	36	37	40	41	42	30	31
9 Total Exports @ Point of Supply	1224	1287	1292	898	898	798	714	721	626	627	627	629	631	351	352	355	356	357	245	246
10 Total Peak Demand @ Point of Supply <small>8+9</small>	5754	5844	5855	5476	5487	5406	5310	5306	5212	5272	5330	5413	5508	5369	5526	5689	5860	6013	6074	6206
11 Planning Reserves @ Point of Supply	551	555	555	557	558	560	557	556	558	565	572	582	593	606	625	645	665	684	703	719
12 System Surplus/Deficit @ Point of Supply <small>7-10-11</small>	259	164	153	188	206	270	369	352	144	115	113	77	54	358	213	42	73	124	52	126

## 2. 2022 Supply/Demand Scenario Dependable Energy Supply & Demand Table

Annual System Firm Energy Demand and Dependable Resources (GWh) 2022 Supply/Demand Scenario																				
Fiscal Year	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42
<b>Supply</b>																				
<b>New Power Resources</b>																				
1 Total New Hydro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 Total New Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	841	1682	1682	2523
3 Total New Wind	0	0	0	0	0	0	0	0	0	0	0	313	625	1251	1876	2814	2814	3127	3752	3752
4 Total New Non-Utility Generation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Total New Power Resources <span style="float:right">1+2+3+4</span>	0	0	0	0	0	0	0	0	0	0	0	313	625	1251	1876	2814	3655	4809	5434	6275
<b>Base Supply Power Resources</b>																				
Existing and Committed Hydro Under Severe Drought	22492	22485	22477	22470	22462	22705	22697	22690	22682	22675	22667	22660	22652	22645	22637	22630	22622	22615	22607	22600
Existing Thermal	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
Station Service	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125	-125
Existing Non-Utility Generation	760	760	760	760	518	462	462	462	462	462	462	462	462	462	450	418	406	1	0	0
Imports	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836	5836
6 Total Base Supply Power Resources	30013	30006	29998	29991	29741	29928	29920	29913	29905	29898	29890	29883	29875	29867	29848	29808	29789	29376	29368	29360
7 Total Power Resources @ Point of Supply <span style="float:right">5+6</span>	30013	30006	29998	29991	29741	29928	29920	29913	29905	29898	29890	30195	30500	31118	31724	32622	33444	34185	34802	35635
<b>Demand</b>																				
2021 Electric Load Forecast	23493	23785	24010	24301	24604	24942	25298	25685	26113	26650	27306	28031	28798	29617	30490	31395	32329	33306	34311	35225
2020 Efficiency Manitoba Demand Side Management Forecast	-460	-604	-790	-968	-1146	-1327	-1501	-1678	-1853	-2015	-2205	-2409	-2616	-2796	-2896	-3018	-3172	-3320	-3475	
Manitoba Net Load @ Common Bus	23033	23181	23220	23333	23458	23615	23797	24008	24260	24635	25101	25622	26183	26912	27694	28499	29311	30134	30991	31751
Manitoba Transmission Losses	1306	1313	1315	1319	1325	1332	1340	1349	1358	1371	1387	1404	1420	1441	1461	1478	1489	1497	1505	1510
8 Manitoba Net Load @ Point of Supply	24339	24494	24535	24652	24783	24946	25137	25356	25618	26006	26488	27027	27603	28353	29155	29977	30800	31632	32496	33261
Contracted Exports	5929	6222	6234	4386	4300	3905	3726	3713	3438	3412	3412	3412	3412	2470	2281	2281	2281	2281	1864	1780
Adverse Water / Market Settlement Under Severe Drought	-2762	-2762	-2762	-1373	-1254	-962	-911	-911	-790	-766	-766	-766	-766	-128	0	0	0	0	0	0
Total Physical Exports @ Border	3167	3460	3472	3013	3046	2943	2815	2803	2648	2646	2646	2646	2646	2342	2281	2281	2281	2281	1864	1780
Export Transmission Losses	265	291	292	253	255	247	236	234	221	221	221	221	221	195	190	190	190	190	154	147
9 Total Physical Exports @ Point of Supply	3432	3751	3764	3266	3302	3189	3037	2869	2867	2867	2867	2867	2867	2537	2471	2471	2471	2471	2018	1927
10 Total Energy Demand @ Point of Supply <span style="float:right">8+9</span>	27772	28245	28299	27918	28085	28136	28187	28393	28488	28873	29355	29894	30470	30889	31626	32448	33271	34103	34514	35187
11 System Surplus/Deficit @ Point of Supply <span style="float:right">7-10</span>	2242	1761	1699	2073	1656	1792	1733	1519	1417	1024	535	302	30	229	98	174	173	83	288	448