



1 **1.0 APPLICATION SUMMARY**

2

3 **1.1 Approvals**

4 In this Application, Manitoba Hydro is requesting an Order of the Public Utilities Board
5 of Manitoba ("PUB") pursuant to section 25 of *The Crown Corporations Governance &*
6 *Accountability Act* and section 47(2) of *The Public Utilities Board Act*, for the following:

7

8 1) Approval, on an interim basis, of rate schedules incorporating an overall increase
9 in General Consumers Revenue of 5.0% effective January 1, 2022; and,

10

11 2) Approval to begin recognizing the revenues from the Major Capital Deferral
12 established by the PUB in Order 69/19 commencing January 1, 2022, with the
13 balance to be amortized over 24 months.

14

15 **1.2 Background**

16 On August 17, 2021, the PUB issued Order 89/21, directing a Status Update process
17 for Manitoba Hydro to provide evidence to assist the PUB in its determination of
18 whether Manitoba Hydro's rates are just and reasonable and costs are fairly allocated
19 among the various customer classes. On September 9, 2021, the PUB proposed
20 certain Minimum Filing Requirements for the Status Update Process for comment by
21 Manitoba Hydro.

22

23 On September 22, 2021, the Minister of Crown Services issued a ministerial directive
24 to the Manitoba Hydro-Electric Board ("MHEB") providing specific instruction for
25 Manitoba Hydro to take all necessary steps to proceed with an Interim Rate
26 Application to the PUB for 2021/22, as well as directing Manitoba Hydro to engage
27 with the PUB on the timing and parameters of its next multi-year General Rate
28 Application.

29

30 As an initial and immediate procedural step to fulfill and comply with this directive,
31 on September 29, 2021, Manitoba Hydro advised the PUB that it intended to file an
32 interim rate application to address the significant financial impacts due to the current
33 drought conditions to ensure the financial health of the corporation. Manitoba Hydro



2021/22 Interim Rate Application

1 the point of causing a credit crisis for the Province of Manitoba. It is imperative that
 2 Manitoba Hydro maintain its self-supporting status.

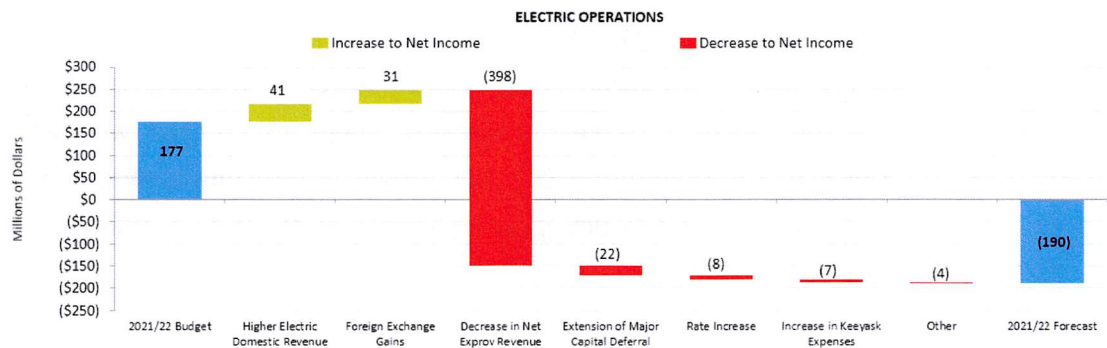
3
 4 **4.0 OVERVIEW OF THE 2021/22 FORECAST**

5
 6 **4.1 2021/22 Forecast Compared to 2021/22 Budget**

7 In its 2021/22 Budget, Manitoba Hydro was projecting net income of \$177 million for
 8 Electric Operations, assuming average water conditions and a projected general
 9 revenue increase of 3.5% effective October 1, 2021. Manitoba Hydro's updated
 10 2021/22 Forecast, which reflects actual results to the end of September 2021, water
 11 conditions to October 20, 2021 and updated forecast assumptions, projects a (\$190)
 12 million net loss in 2021/22, assuming a 5.0% overall general revenue increase effective
 13 January 1, 2022. Links to Manitoba Hydro's financial results for the quarters ended
 14 June 30, 2021 and September 30, 2021, can be found in the response to PUB MFR 4,
 15 and Manitoba Hydro's 2021/22 Forecast and 2021/22 Budget can be found in the
 16 response to PUB MFR 3.

17
 18 Figure 17 below illustrates the primary factors driving the significant change (\$366
 19 million decrease in net income) in Manitoba Hydro's 2021/22 Forecast compared to
 20 the 2021/22 Budget.

21
 22 Figure 17: Comparison of 2021/22 Budget to 2021/22 Forecast Main Drivers of Change



23
 24
 25 As discussed in Section 2.3 above, the most significant factor driving the change in the
 26 2021/22 Forecast is the \$398 million reduction in net extraprovincial revenues, which
 27 is the result of a decrease in dependable and opportunity export sales, as well as an

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Financial Results and Forecasts

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Financial Results and Forecasts

Actual, budgeted, outlook, or forecast operating statements, balance sheets, and cash flow statements (both direct and indirect methods) for 2020/21, 2021/22, 2022/23, and all additional forward years for which these documents exist. [2019 GRA Appendix 1, Appendix 2].

Attached are the actual and projected operating statements, balance sheets, and cash flow statements (both direct and indirect methods) for 2020/21, 2021/22, and 2022/23.

Manitoba Hydro's 2021/22 Interim Rate Application
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 Financial Results and Forecasts

	ELECTRIC OPERATIONS OPERATING STATEMENT (In Millions of Dollars)			
	ACTUAL	BUDGET	FORECAST	PRELIMINARY PLAN
	2020/21	2021/22	2021/22	2022/23
<i>For the year ended March 31</i>				
REVENUES				
Domestic Revenue				
at approved rates	1 714	1 751	1 792	1 769
additional	-	35	27	88
Extraprovincial	611	806	637	916
Other	28	29	29	29
	<u>2 353</u>	<u>2 620</u>	<u>2 485</u>	<u>2 802</u>
EXPENSES				
Operating and Administrative	534	557	557	595
Net Finance Expense	782	1 019	994	1 039
Depreciation and Amortization	530	583	579	621
Water Rentals and Assessments	128	131	98	134
Fuel and Power Purchased	184	166	428	157
Capital and Other Taxes	149	154	152	161
Other Expenses	45	77	87	106
Corporate Allocation	8	8	8	8
	<u>2 360</u>	<u>2 694</u>	<u>2 902</u>	<u>2 820</u>
Net Income before Net Movement in Reg. Deferral	(7)	(74)	(417)	(19)
Net Movement in Regulatory Deferral	121	234	214	225
Net Income	<u>114</u>	<u>160</u>	<u>(203)</u>	<u>206</u>
Net Income Attributable to:				
Manitoba Hydro	116	177	(190)	200
Non-Controlling Interests	(2)	(16)	(13)	6
	<u>114</u>	<u>160</u>	<u>(203)</u>	<u>206</u>
Approved Percent Increase	2.90%			
Proposed Percent Increase		3.50%	5.00%	0.00%

Manitoba Hydro's 2021/22 Interim Rate Application
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Financial Results and Forecasts

**ELECTRIC OPERATIONS
BALANCE SHEET
(In Millions of Dollars)**

<i>For the year ended March 31</i>	ACTUAL 2020/21	BUDGET 2021/22	FORECAST 2021/22	PRELIMINARY PLAN 2022/23
ASSETS				
Plant in Service	24 286	29 253	28 184	29 122
Accumulated Depreciation	(2 466)	(3 069)	(2 974)	(3 543)
Net Plant in Service	21 820	26 184	25 210	25 579
Construction in Progress	3 521	68	485	422
Current and Other Assets	2 407	2 031	2 433	1 908
Goodwill and Intangible Assets	1 092	1 144	1 069	1 044
Total Assets before Regulatory Deferral	28 840	29 428	29 197	28 954
Regulatory Deferral Balance	1 161	1 266	1 314	1 412
	30 001	30 694	30 511	30 366
LIABILITIES AND EQUITY				
Long-Term Debt	22 598	23 121	23 370	23 003
Current and Other Liabilities	3 981	4 120	3 874	4 006
Provisions	44	54	55	53
Deferred Revenue	570	588	599	613
Retained Earnings	3 074	3 240	2 885	3 084
Accumulated Other Comprehensive Income	(560)	(642)	(504)	(499)
Total Liabilities and Equity before Regulatory Deferral	29 707	30 482	30 278	30 260
Regulatory Deferral Balance	294	213	233	106
	30 001	30 694	30 511	30 366

Manitoba Hydro's 2021/22 Interim Rate Application
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Financial Results and Forecasts

ELECTRIC OPERATIONS
CASH FLOW STATEMENT (Indirect)
(In Millions of Dollars)

	ACTUAL	BUDGET	FORECAST	PRELIMINARY
	2020/21	2021/22	2021/22	PLAN
				2022/23
For the year ended March 31				
OPERATING ACTIVITIES				
Net Income	114	160	(203)	206
Add Back:				
Depreciation and Amortization	530	583	579	621
Net Finance Expense	782	1 019	994	1 039
Net Movement Impacts	14	(48)	(27)	1
Adjustments for Non-Cash Items	(101)	4	2	(14)
Adjustments for Non-Cash Working Capital Accounts	(62)	3	(32)	(33)
Interest Paid	(1 007)	(1 057)	(1 046)	(1 046)
Interest Received	4	3	3	4
Cash Provided by Operating Activities	274	668	270	778
FINANCING ACTIVITIES				
Proceeds from Long-Term Debt	2 560	1 410	2 093	1 100
Retirement of Long-Term Debt	(1 532)	(1 161)	(1 346)	(1 098)
Repayments from/(Advances to) Investment Entities	(24)	(29)	(12)	16
Proceeds from Partnership Issuances	24	29	12	7
Sinking Fund Investment Withdrawals	232	232	300	185
Sinking Fund Investment Purchases	(232)	(244)	(300)	(431)
Other	(4)	0	(1)	(1)
Cash Provided by Financing Activities	1 024	237	745	(223)
INVESTING ACTIVITIES				
Additions to Property, Plant and Equipment	(1 017)	(1 260)	(777)	(886)
Additions to Intangible Assets	(29)	(24)	(24)	(19)
Additions to Regulatory Deferral Balances	(45)	(85)	(97)	(98)
Contributions Received	45	41	24	20
Cash Paid to the City of Winnipeg	(16)	(16)	(16)	(16)
Cash Paid for Mitigation and Major Development Obligations	(21)	(118)	(99)	(64)
Other	(2)	(0)	(22)	(21)
Cash Used for Investing Activities	(1 085)	(1 463)	(1 011)	(1 085)
Net Increase (Decrease) in Cash	213	(557)	4	(530)
Cash at Beginning of Year	904	1 120	1 117	1 121
Cash at End of Year	1 117	563	1 121	592

Manitoba Hydro's 2021/22 Interim Rate Application
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Financial Results and Forecasts

ELECTRIC OPERATIONS
CASH FLOW STATEMENT (Direct)
(In Millions of Dollars)

	ACTUAL	BUDGET	FORECAST	PRELIMINARY
<i>For the year ended March 31</i>	2020/21	2021/22	2021/22	PLAN
				2022/23
OPERATING ACTIVITIES				
Cash Receipts from Customers	2 291	2 649	2 477	2 793
Cash Paid to Suppliers and Employees	(1 014)	(927)	(1 164)	(974)
Interest Paid	(1 007)	(1 057)	(1 046)	(1 046)
Interest Received	4	3	3	4
Cash Provided by Operating Activities	274	668	270	778
FINANCING ACTIVITIES				
Proceeds from Long-Term Debt	2 560	1 410	2 093	1 100
Retirement of Long-Term Debt	(1 532)	(1 161)	(1 346)	(1 098)
Repayments from/(Advances to) External Entities	(24)	(29)	(12)	16
Proceeds from Partnership Issuances	24	29	12	7
Sinking Fund Investment Withdrawals	232	232	300	185
Sinking Fund Investment Purchases	(232)	(244)	(300)	(431)
Other	(4)	0	(1)	(1)
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Cash at Beginning of Year	904	1 120	1 117	1 121
Cash at End of Year	1 117	563	1 121	592



**2021/22 Interim Rate Application
COALITION/MH I-6**

REFERENCE:

Application Page 8 & Coalition MFR 24

PREAMBLE TO IR (IF ANY):

On Page 8 of the Application, Section 1.3, Manitoba Hydro states that "...the proposed 5.0% general revenue increase reasonably balances the financial needs of Manitoba Hydro by addressing the very severe and immediate financial impacts of the drought, and impact on customers during the current pandemic and period of higher inflation."

In Coalition MFR 24, Manitoba Hydro was asked how it balanced the financial integrity of the Corporation with the impact of the proposed interim rate increase on customers. The response was a reference back to Section 1.3 of the Application. Section 1.3 of the Application does not outline the factors that Manitoba Hydro considered in balancing the interests of customers and how these factors were weighted into the request for a 5.0% interim rate increase.

QUESTION:

Please elaborate on the factors that Manitoba Hydro considered and how it balanced the rate impacts on customers with concerns over the financial health of the utility.

RESPONSE:

In considering and balancing the impact of the proposed rate increase and the financial health of the utility, the Corporation considered the financial impacts of the drought in 2021/22 and in the near term. As noted in the Application, Manitoba Hydro is anticipating a reduction in net extraprovincial revenue of \$398 million in 2021/22 as a result of the drought. As set out in Coalition/MH I-3b, absent any rate relief, Manitoba Hydro is projecting a net loss of \$217 million in 2021/22 and a cash deficiency to fund core operations of \$375 million. This significant financial impact will deteriorate the financial position of the utility in every metric and limit its capacity to address future risks (including



**2021/22 Interim Rate Application
COALITION/MH I-6**

continued drought, weather events, and changes in energy market prices and interest rates).

If Manitoba Hydro were to consider the level of increase strictly from a financial perspective, a rate increase greater than 12% would be required to recover this level of net losses over a 12-month period, and a rate increase of approximately 21% would be required to recover the borrowings to fund core operations over a 12 month period. With consideration of the impact on customers in mind, Manitoba Hydro recognizes that it is not possible to recover fully from the drought in one year and smoothing the impact of the drought by capping the proposed rate increase at 5% is appropriate in the circumstances.

In determining the proposed level of increase in this Application, Manitoba Hydro considered the principles of rate stability and predictability for customers and the current pandemic, period of higher inflation and high natural gas costs. Given the very severe and immediate financial impacts of the drought with the existing financial circumstances of the Corporation, the proposed 5.0% rate increase reasonably balances the financial health of the utility with the impact on customers.



**2021/22 Interim Rate Application
COALITION/MH I-3b**

REFERENCE:

Application, Pages 7 and 8, PUB MFR's 4, 6 and 8 & Coalition MFR 22; Manitoba Hydro 2017/18 & 2018/19 General Rate Application PUB/MH I-3a

PREAMBLE TO IR (IF ANY):

On Page 7 of the Application, Manitoba Hydro states that "Should the proposed interim rate increase be approved it is anticipated to generate \$27 million of incremental revenue in 2021/22 and \$88 million in 2022/23 ...when considering the level of increase to request in this Application, Manitoba Hydro considered the following: The need to limit further deterioration in Manitoba Hydro's financial health. Even with the proposed 5.0% revenue increase Manitoba Hydro is projecting a net loss of \$190 million in 2021/22, along with a deterioration in its debt ratio to 87% in 2021/22 and 88% in 2022/23."

On Page 8 of the Application, Manitoba Hydro states that "Drought has both an operational and financial impact on Manitoba Hydro. Manitoba Hydro plans and operates its system knowing that droughts will occur at some time in the future."

In PUB MFR 4, the MHEB Quarterly Report for the three months ended June 30, 2021, Manitoba Hydro states "Manitoba Hydro is currently projecting breakeven net income for the 2021-22 fiscal year compared to the budgeted net income of \$190 million. The significant decrease in net income is primarily driven by lower experienced and projected revenues due to reduced volumes available for sale in the export market as a result of unfavorable water conditions."

In PUB MFR 8, Manitoba Hydro states that "...it is important to recognize that retained earnings are not a cash reserve, as demonstrated by incremental borrowings in the current year."

In Coalition MFR 22, Manitoba Hydro states that "Manitoba Hydro is, however, anticipating issuance of a small amount of commercial paper. It should be noted that the increased limit of \$1.5 billion for the commercial paper program has not been approved for use, nor guaranteed as of yet, by the Province of Manitoba."



**2021/22 Interim Rate Application
COALITION/MH I-3b**

In PUB MFR 6, Manitoba Hydro provides calculations of the Debt Ratio, EBITDA Interest Coverage Ratio and Capital Coverage Ratio for 2021/22 and 2022/23, including the impacts of the proposed 5.0% rate increase.

QUESTION:

b) Please provide the forecast net income and retained earnings for 2021/22 and 2022/23, as well as the Debt Ratio, EBITDA Interest Coverage Ratio and Capital Coverage Ratio calculations assuming the following rate increases effective January 1, 2022 and keeping the assumed rate increase for 2022/23 at 0%:

- i. 0%
- ii. 1%
- iii. 2%
- iv. 3%
- v. 4%.

RESPONSE:

The table below summarizes the forecast net income, retained earnings, Debt Ratio, EBITDA Interest Coverage Ratio, Capital Coverage Ratio, Cash Surplus/(Deficiency) to Fund Core Business Operations and Revenue as a Percent of Interest Paid for 2021/22 and 2022/23, for the requested 0%, 1%, 2%, 3%, and 4% January 1, 2022 rate increases.



**2021/22 Interim Rate Application
 COALITION/MH I-3b**

	Forecast		Preliminary Plan		Scenario i 0% Jan 1, 2022		Scenario ii 1% Jan 1, 2022		Scenario iii 2% Jan 1, 2022		Scenario iv 3% Jan 1, 2022		Scenario v 4% Jan 1, 2022	
	2021/22	2022/23	2021/22	2022/23	2021/22	2022/23	2021/22	2022/23	2021/22	2022/23	2021/22	2022/23	2021/22	2022/23
\$ in millions														
Proposed Rate Increase	5.0%	0.0%	0.0%	0.0%	1.0%	0.0%	2.0%	0.0%	3.0%	0.0%	4.0%	0.0%		
Additional Domestic Revenue	\$27	\$88	\$0	\$0	\$5	\$18	\$11	\$35	\$16	\$53	\$22	\$70		
Net Income/(Loss)	(\$190)	\$200	(\$217)	\$111	(\$211)	\$129	(\$206)	\$147	(\$201)	\$164	(\$195)	\$182		
Retained Earnings	\$2 885	\$3 084	\$2 858	\$2 969	\$2 863	\$2 992	\$2 868	\$3 015	\$2 874	\$3 038	\$2 879	\$3 061		
Debt Ratio	87.0%	87.6%	87.1%	88.1%	87.0%	88.0%	87.0%	87.9%	87.0%	87.8%	87.0%	87.7%		
EBITDA Interest Coverage Ratio	1.36	1.78	1.34	1.70	1.34	1.72	1.35	1.73	1.35	1.75	1.36	1.77		
Capital Coverage	0.80	1.48	0.75	1.32	0.76	1.35	0.77	1.38	0.78	1.42	0.79	1.45		
Interest Paid as a % of Total Revenue	42%	37%	43%	39%	42%	38%	42%	38%	42%	38%	42%	38%		
Cash Surplus/(Deficiency) to Fund Core Business Operations	(\$348)	\$51	(\$375)	(\$37)	(\$370)	(\$19)	(\$365)	(\$2)	(\$359)	\$16	(\$354)	\$34		



**2021/22 Interim Rate Application
PUB/MH I-3**

REFERENCE:

PUB MFR 18

PREAMBLE TO IR (IF ANY):

QUESTION:

Recalculate the Net Extra-provincial Revenue [NER] and Net Income for 2022/23 using the full 100+ year flow record, consistent with the methodology used in the 2019/20 GRA and response to PUB/MH I-29. Provide the NER and Net Incomes in tabular form as well as overlay the recalculated NER and Net Incomes on the graph provided in response to PUB MFR 18, highlighting the average NER for each methodology.

RESPONSE:

The net extraprovincial revenue and net income for 2022/23 using the 108-year long-term flow data ("LTFD") is provided in the table below. The results between the P25 and P75 values have been denoted in grey in the table below.

While the LTFD increases the low-end net extraprovincial revenue risk by \$184 million and increases the high-end by \$43 million compared to the most recent 40-year flow record, the average (arithmetic mean) of the 108 flow conditions results in net extraprovincial revenue of \$643 million (\$18 million higher than the 2022/23 Preliminary Plan of \$625 million) and a net income of \$219 million (\$19 million higher than the 2022/23 Preliminary Plan of \$200 million).

Please see the response to COALITION/MH I-1c) and d) for Manitoba Hydro's rationale underlying the change from using a historical record of 100+ years of water flows to the most recent 40 years of historic flows for establishing the average net extraprovincial revenue forecast for financial budgeting purposes.



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RANGE OF NET EXTRAPROVINCIAL REVENUE & NET INCOME FOR 2022/23
 LONG-TERM FLOW DATA

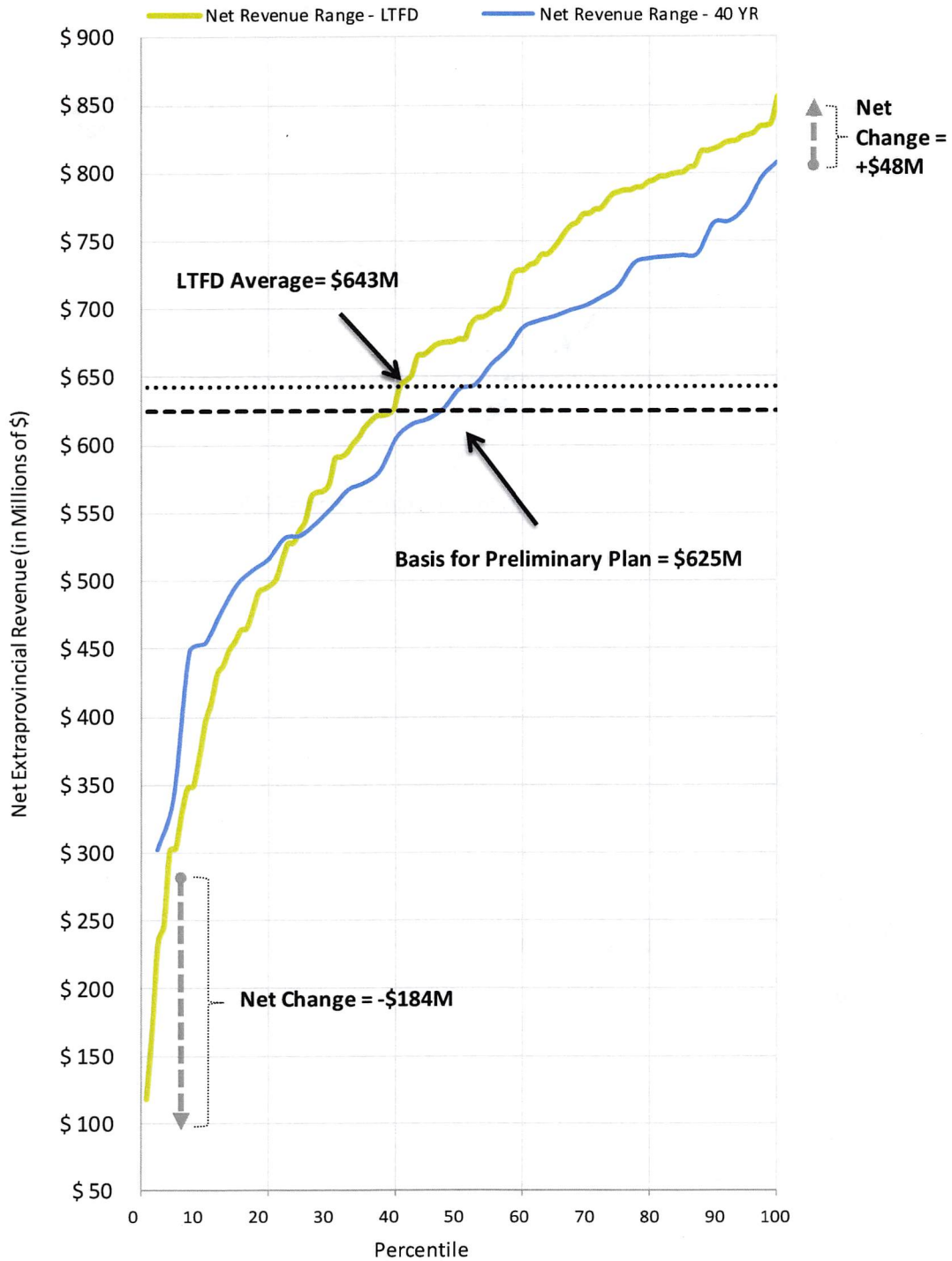
#	NET EXTRAPROVINCIAL REVENUE	NET INCOME
1	117.8	(311.1)
2	169.6	(259.2)
3	232.9	(194.9)
4	246.4	(180.3)
5	301.1	(125.5)
6	302.8	(123.5)
7	328.8	(97.5)
8	347.2	(79.0)
9	349.1	(77.2)
10	370.5	(55.7)
11	395.8	(30.3)
12	410.1	(16.1)
13	431.1	4.9
14	437.1	10.9
15	448.4	22.3
16	454.6	28.5
17	463.1	37.0
18	464.8	39.7
19	477.2	51.2
20	491.1	66.1
21	493.7	68.7
22	496.5	71.5
23	500.6	75.6
24	514.1	89.1
25	526.6	101.7
26	527.7	102.8
27	536.8	111.9
28	544.1	119.2
29	561.9	137.1
30	564.9	140.0
31	565.9	141.0
32	570.9	146.1
33	589.5	164.7
34	590.7	165.9
35	593.9	169.0
36	600.4	176.6
37	605.2	180.4
38	612.5	187.7
39	617.0	193.2
40	620.8	197.0
41	621.4	197.6
42	622.5	198.7
43	626.6	202.8
44	642.5	218.7
AVG	643.1	219.3
45	646.5	222.7
46	651.0	227.2
47	664.6	240.9
48	665.5	241.7
49	668.7	245.0
50	672.7	249.0
51	674.3	250.6
52	674.8	251.2
53	675.2	251.6
54	677.2	253.5

#	NET EXTRAPROVINCIAL REVENUE	NET INCOME
55	677.3	253.7
56	687.9	264.3
57	692.5	268.9
58	693.2	269.6
59	695.6	272.0
60	699.0	275.4
61	700.1	276.5
62	707.6	284.0
63	723.8	301.2
64	727.8	305.2
65	728.0	305.4
66	731.9	309.3
67	733.5	311.0
68	739.4	316.8
69	739.8	317.3
70	744.1	321.5
71	749.6	327.1
72	756.2	333.7
73	761.0	338.5
74	763.3	340.7
75	769.0	346.4
76	769.6	347.1
77	772.6	350.1
78	773.5	351.0
79	778.9	356.4
80	783.8	361.3
81	785.4	362.9
82	786.7	364.2
83	786.9	364.4
84	788.8	366.3
85	789.1	366.6
86	792.5	370.0
87	794.1	371.6
88	796.6	374.1
89	796.9	374.4
90	798.4	375.9
91	799.3	376.7
92	799.9	377.4
93	803.5	381.0
94	804.8	382.3
95	815.0	392.5
96	815.5	393.0
97	816.8	394.4
98	818.5	396.0
99	821.3	398.8
100	822.6	400.1
101	823.3	400.8
102	826.2	403.7
103	827.3	404.8
104	829.1	406.6
105	833.4	410.9
106	833.9	411.4
107	836.5	414.0
108	855.1	432.6



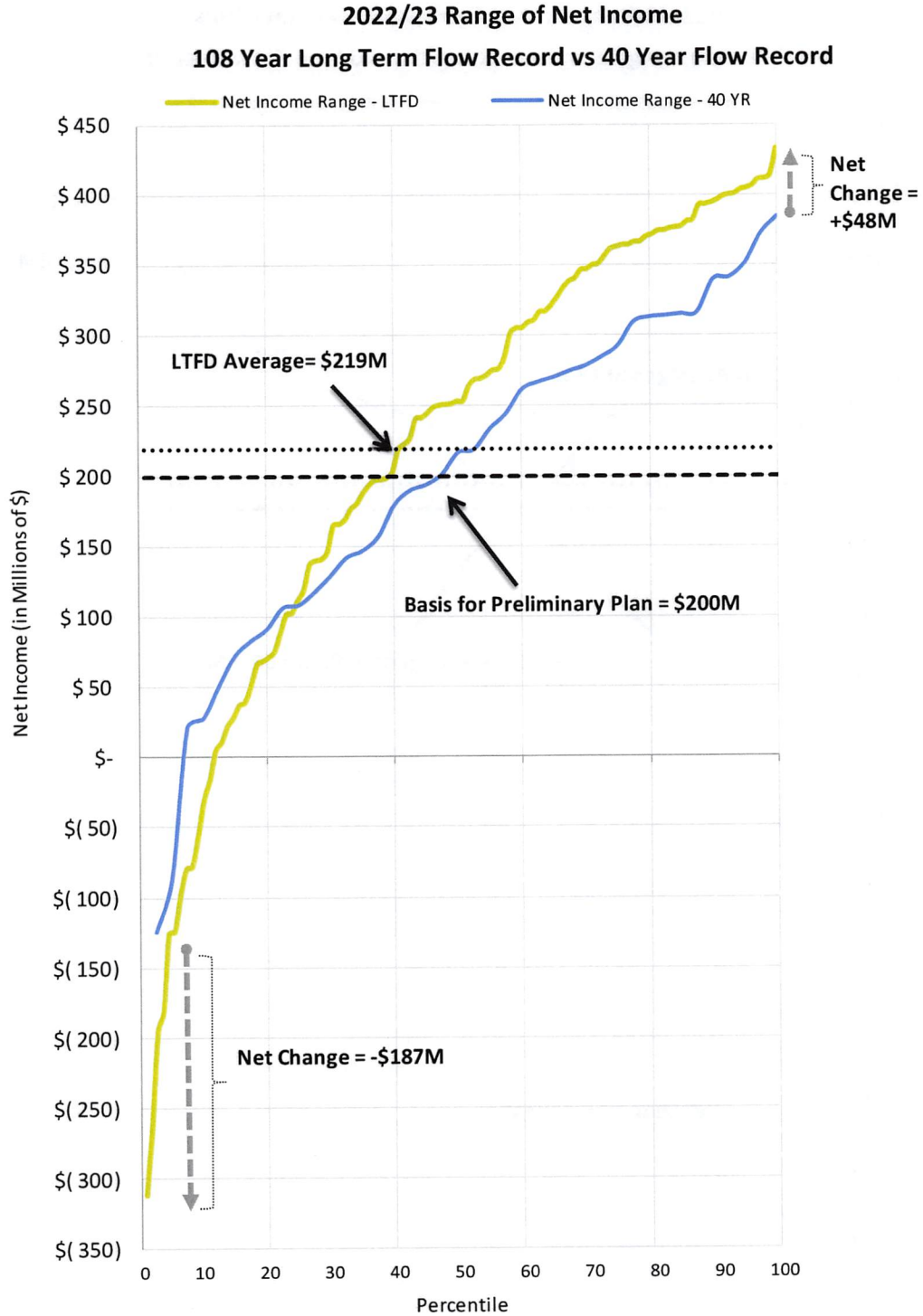
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2022/23 Range of Net Extraprovincial Revenues
108 Year Long Term Flow Record vs 40 Year Flow Record





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**2021/22 Interim Rate Application
COALITION/MH I-1a-d**

REFERENCE:

Application Pages 9, 18 and Figure 9 & PUB MFR 18, Page 4

PREAMBLE TO IR (IF ANY):

On page 18 of the Application, Figure 9, Manitoba Hydro provided a calculation of forecast net extraprovincial revenues (NER) for 2021/22 based on current water conditions (October 20, 2021) of \$111 million.

In PUB MFR 18, Page 4, Manitoba Hydro provided a table with a range of potential NER for 2022/23 based on 40 potential inflow scenarios, with the lowest flow scenario (#1) producing a projected NER of approximately \$302 million.

On Page 9 of the Application, Manitoba Hydro indicates that the 2021/22 Budget and 2022/23 Preliminary Plan now assume a shorter record of 40 more recent water flows as compared to the 100+ years that was previously used for determining average NER for budgeting purposes and that “recent historic flow data has greater temporal and spatial resolution compared to older records.”

QUESTION:

- a) Please explain which of the 40 potential inflow scenarios best fits the forecast NER for 2021/22 of \$111 million.
- b) Please explain the factors or circumstances that would result in the lowest water flow scenario NER for 2022/23 of \$302 million being approximately 2.7 times ($\$302/\$111 = 2.72x$) higher than the forecast NER for 2021/22.
- c) Please explain/elaborate on why more recent water flow data has greater temporal and spatial resolution.
- d) Please provide the rationale underlying the change from using a historical record of 100+ years of water flows to a shorter record of 40 years of more recent historic flow. Please also explain the process undertaken by Manitoba Hydro to decide on and implement this change.



**2021/22 Interim Rate Application
 COALITION/MH I-1a-d**

RESPONSE:

- a) In terms of total simulated hydraulic generation, the flow year used to prepare the 2021/22 Budget that produced the hydro generation closest to the 2021/22 Forecast is the 1987 hydrologic year.
- b) The main factors driving the year over year difference in NER between 2021/22 Forecast and the low flow scenario used in the 2022/23 Preliminary Plan are export and import prices. As shown in Table 1, in the 2022/23 low flow scenario, year over year dependable revenues are up \$117 million largely due to the commencement of the 215 MW SPC Sale and 100 MW WPS Sale. This is offset partly by reduced opportunity exports of \$40 million. Although the overall volume of purchases in the low flow scenario for 2022/23 is similar to the 2021/22 Forecast (differing by 16 GWh), the cost of purchases is approximately \$98 million less, primarily due to lower forecast prices overall and lower on peak purchase volumes.

Table 1: Year over year reconciling of 2021/22 Forecast to low flow scenario underlying 2021/22 Budget

		Revenue/Cost in \$ millions	Energy in GWh
2021/22 Forecast NER / Net Export Energy		\$111	384
Year-Over- Year Change	+ Dependable Revenue	\$117	967
	+ Opportunity Revenue	\$(40)	(421)
	- Imports/Purchases	\$(98)	16
	- Water Rentals	\$2	-
	+ Other NER	18	-
2022/23 Low Flow NER / Net Export Energy		\$302	914

Hydraulic generation in the 2021/22 Forecast is 26.4 Terrawatt-hours (“TWh”) which is similar to the low flow scenario used in the 2022/23 Preliminary Plan which produces 26.6 TWh. There is less storage drawn in the low flow year for 2022/23 Preliminary Plan as compared to what is projected to occur through 2021/22. The effect of difference in storage draw is offset by the additional generation from Keeyask, which will be fully in service in 2022/23.



**2021/22 Interim Rate Application
COALITION/MH I-1a-d**

In addition to actual total inflows and market prices, factors such as the timing of and distribution of inflows, weather driven impacts on domestic demand, and generation and transmission availability, will ultimately impact the difference in NER between the 2021/22 Forecast and what actually transpires in 2022/23.

- c) Early periods of the flow records are based on monthly flows as compared to more recent data which is based on daily average observations.

The long-term flow data has lower spatial resolution consisting of 16 inflow locations in the hydraulic network modelled using this data, as compared to 41 flow locations that are used in modelling the system with more recent records. For example, with more recent higher spatial resolution data, 17 inflow locations are modelled in the Winnipeg River Basin. In contrast, the Winnipeg River flows are represented as a single location in the long-term records at Slave Falls generating station, which is downstream of the major reservoirs in that basin.

For the very early portion of the record, flow was not recorded in the sub-basins of many inflow locations, and inflows were statistically reconstructed using monthly and annual water level, flow, and precipitation observations in other proxy sub-basins. These flow reconstructions were performed on a monthly timestep for use in modelling at the monthly timescale, and a daily estimate is unavailable.

- d) Manitoba Hydro has a long record of historical water level and flow and uses this for planning and operational reliability purposes. The shorter record of 40-year duration is used for near-term operations planning and budgeting only.

Manitoba Hydro has been adding new tools to improve inflow forecasting and system modelling for operations planning. This requires historical data with greater resolution. As indicated in part c) older stations in many locations were limited and did not always collect daily data. In some cases, historical records were extended or analyzed with adjacent basin information to prepare a more basin wide representation. While these extended and/or expanded records of the information can facilitate modelling on longer



**2021/22 Interim Rate Application
COALITION/MH I-1a-d**

time steps, such as monthly and seasonally, these records are not detailed enough for finer resolution modelling. More recent information collected since major Manitoba Hydro projects have been operational, over the past 40 years, provide a more complete set of information (higher spatial and temporal resolution data) required to undertake more detailed inflow modelling. As a result, Manitoba Hydro has adopted the use of the 40-year record for this purpose.

Higher spatial and temporal resolution data enables more detailed system modelling which can better inform operations planning. Using this data to simulate the test year and budget provides better representation of current conditions and planned operations are better reflected in Manitoba Hydro's financial forecasts. For example, in the longer flow record, the Winnipeg River is lumped as a single inflow location. The record does not specifically reflect more recent changes to operating rule curves in the basin, such as the International Joint Commission ("IJC") rule curves for Rainy Lake and Namakan Lake Rule Curves that were implemented in 2000, limiting the drawdown of these reservoirs. The IJC Rule Curves were later updated in 2018, again altering the regulation of these reservoirs. The more recent record represents the evolving operating priorities of the Lake of the Woods Control Board which is responsible for regulation of major storage reservoirs in Ontario. The enhanced spatial resolution of the 40-year record permits the modelling of upstream reservoirs including the impact of current storage levels and better reflects short-term inflows into the Manitoba Hydro system based on the most current operating rules and priorities.

Although the record is shorter, the last 40 years of record include a range of flow conditions from drought to floods.

Using a more recent record of flows also inherently captures potential impacts of climate change in near term forecasts. It has been observed that the timing of freeze-up and melt has changed over the period of the long-term flow record.

In terms of process, Manitoba Hydro reviewed the impact of using the long-term record versus the 40-year record in simulating *average* net export revenues for financial forecasting purposes. It was shown that average net export revenue estimates were consistent relative to the level of uncertainty involved. For example, the difference in



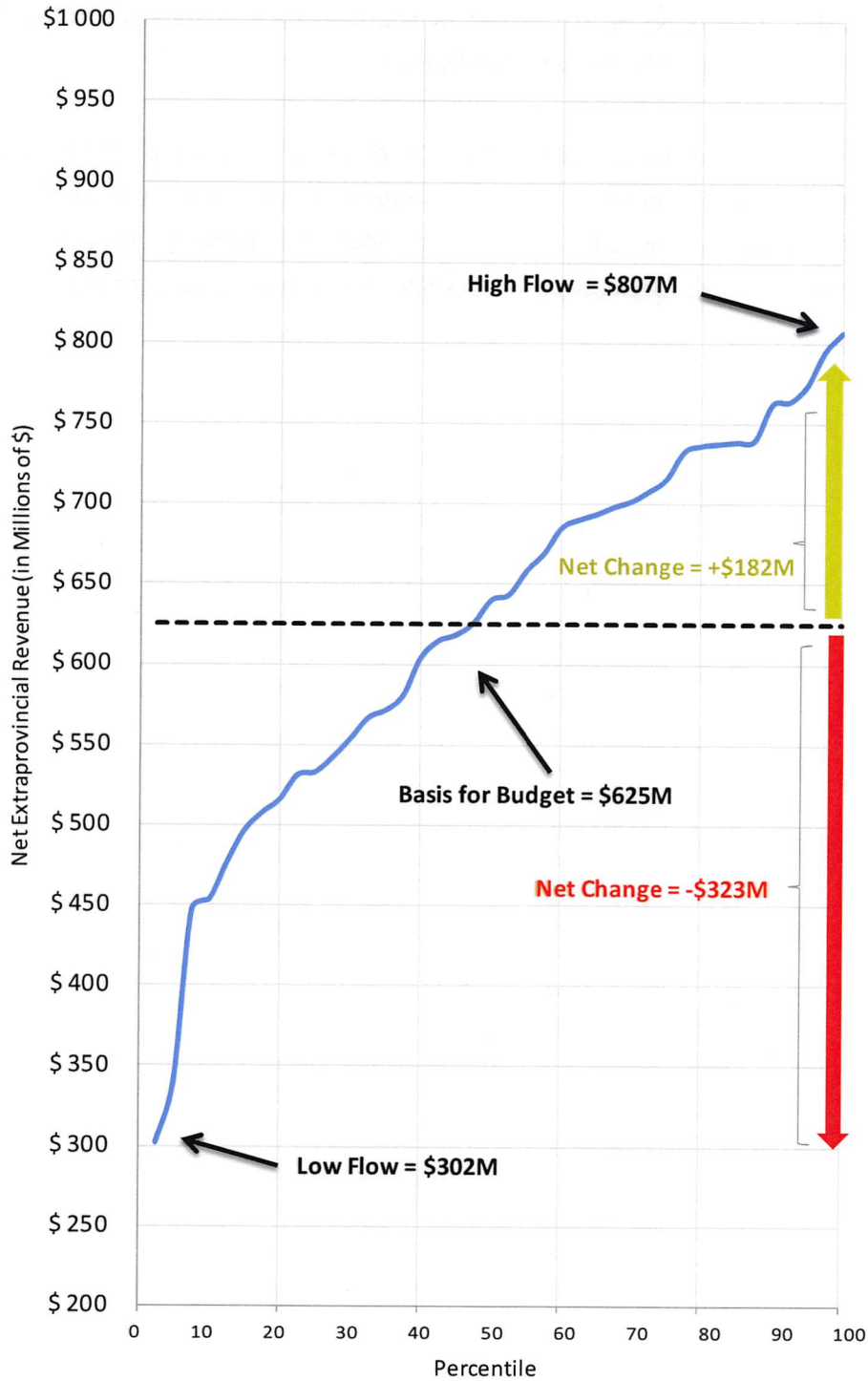
**2021/22 Interim Rate Application
COALITION/MH I-1a-d**

average Net Extraprovincial Revenue (“NER”) between the 40-year record and the 100+ year record is an increase of \$18 million or approximately 3% relative to the 2022/23 Preliminary Plan. Please also refer to PUB/MH I-3.

As explained in Manitoba Hydro 2017/18 & 2018/19 General Rate Application COALITION/MH I-62a-e, prior to MH16, Manitoba Hydro had used a single flow case to forecast net export revenues for the test year. Manitoba Hydro will continue to review the use of flow records for financial forecasts for the test year and Budget purposes.

Manitoba Hydro's 2021/22 Interim Rate Application
PUB MFR 18
Export and Domestic Revenues

2022/23 Range of Net Extraprovincial Revenues



PUB Advisor Table

Comparison 2017/18 & 2018/19 GRA Exhibit MH-93 with 2022/23 Preliminary Plan

Rate Increases	MH-93	2021/22 Interim
2017/18	3.36%	3.36%
2018/19	3.57%	3.6%
2019/20	3.57%	2.4%
2020/21	3.57%	2.9%
2021/22	3.57%	5%
2022/23	3.57%	0%
Cumulative	23.17%	18.47%

	MH-93 2022/23	Prelim Plan 2022/23	Change
Domestic & Other Revenue	1,933	1,886	(47)
Net Export Revenue	512	625	113
Total Revenue	2,445	2,511	66
Expenses	2,602	2,530	(72)
Net Movement	138	225	87
Non-Controlling Interest	(10)	(6)	4
Net Income	(29)	200	229

	MH-93 2023/24	Prelim Plan 2022/23	Change
Domestic & Other Revenue	2,001	1,886	(115)
Net Export Revenue	525	625	100
Total Revenue	2,526	2,511	(15)
Expenses	2,702	2,530	(172)
Net Movement	76	225	149
Non-Controlling Interest	(11)	(6)	5
Net Income	(111)	200	311

*Numbers may not add due to rounding



2017/18 & 2018/19 ELECTRIC GENERAL RATE APPLICATION

Follow-Up Questions to Manitoba Hydro Undertaking Nos. 7 & 8 from Counsel for MIPUG (email dated December 21, 2017)

On December 21, 2017, MIPUG requested the following:

1. Please provide the data values, by year, used to generate Undertaking 8.
2. Add a line (scenario) to Undertaking 8 (the 1990 base scenario) that is based on an IFF as follows (please provide the underlying IFF 6 page financial forecast scenario as well):
 - a) IFF16 Update with Interim assumptions, except where noted.
 - b) 12 year WATM
 - c) Overhead accruals at \$20M continue throughout, amortized at 30 year rate (consistent with PUB/MH-I-1(e))
 - d) Depreciation at ASL throughout, no amortization of difference with ELG.
 - e) Rate increases as necessary consistent with the approach in Coalition-MH-II-19 (i.e., equal annual increases to target 75:25 by 2035/36)
 - f) Make sure the graph goes out to 2035/36.
 - g) Please also provide the summary data for this scenario as per Undertaking #9 page 2 (i.e., max net debt, etc.)

Response:

Notwithstanding the concerns outlined below, Manitoba Hydro is providing the data values included in Undertaking No. 8 and the projected financial statements, including data values, reflecting the December 21, 2017 MIPUG Scenario.

As noted in the responses to PUB/MH II-21 and PUB/MH II-28, Manitoba Hydro's financial plan reflects a goal to return to its target 25% equity to capitalization ratio in 10 years and believes limited value should be ascribed to forecasts a decade or more in the future. The potential for volatility in key assumptions, many of which are beyond Manitoba Hydro's ability to control, reduces the second half of a 20 year forecast to little more than a hypothetical modeling exercise.

Manitoba Hydro maintains all the same concerns outlined in PUB/MHI-1d) and e) related to items c) and d) of MIPUG's request. Furthermore, the 12 Year WATM in Manitoba Hydro's debt management strategy is justifiable only if there is a reasonable expectation of sufficient cash flow to retire the repositioned debt. The sufficient cash flow stems from the path of higher rate increases in MH16 Update with Interim and not from the rate path included in the scenario requested by MIPUG and presented below.



The table below outlines the accounting treatment in MH16 Update with Interim, and the assumptions in part c) and d), of the MIPUG scenario.

	MH16 Update with Interim	MIPUG Scenario Dec 21/17
Ineligible Overhead		
Ineligible Overhead Annual Provision	\$20 million	\$20 million
Ineligible Overhead Amortization Period	20 years	30 years
Ineligible Overhead Deferral Until	2022/23	Indefinite
Equal Life Group (ELG)/Average Service Life (ASL)		
ELG/ASL Amortization Period	20 years	None
ELG/ASL Deferred Until	2022/23	Indefinite



ELECTRIC OPERATIONS
PROJECTED OPERATING STATEMENT
MIPUG Scenario December 21, 2017
(In Millions of Dollars)

For the year ended March 31

	ACTUAL										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
REVENUES											
Domestic Revenue at approved rates	1 515	1 578	1 565	1 551	1 537	1 544	1 542	1 542	1 553	1 567	1 583
additional*	-	37	110	168	228	292	357	425	498	577	660
BPIII Reserve Account	(96)	(151)	3	79	79	79	79	26	-	-	-
Extraprovincial	460	514	469	420	567	693	779	788	805	667	671
Other	28	30	31	31	33	33	34	34	35	35	36
	<u>1 907</u>	<u>2 008</u>	<u>2 178</u>	<u>2 251</u>	<u>2 443</u>	<u>2 642</u>	<u>2 791</u>	<u>2 816</u>	<u>2 891</u>	<u>2 845</u>	<u>2 949</u>
EXPENSES											
Operating and Administrative	536	518	501	511	513	524	536	548	559	571	583
Finance Expense	608	587	677	749	831	907	1 159	1 205	1 213	1 211	1 226
Finance Income	(17)	(17)	(21)	(28)	(35)	(33)	(37)	(13)	(12)	(13)	(14)
Depreciation and Amortization	375	396	471	515	555	597	689	714	726	739	752
Water Rentals and Assessments	131	130	120	110	113	117	127	128	131	131	131
Fuel and Power Purchased	132	124	140	158	165	156	140	135	138	127	129
Capital and Other Taxes	119	132	145	154	161	166	174	175	176	177	177
Other Expenses	60	116	109	481	94	92	71	64	67	71	76
Corporate Allocation	8	8	8	8	8	8	8	8	8	8	8
	<u>1 952</u>	<u>1 995</u>	<u>2 150</u>	<u>2 660</u>	<u>2 406</u>	<u>2 533</u>	<u>2 869</u>	<u>2 965</u>	<u>3 006</u>	<u>3 022</u>	<u>3 069</u>
Net Income before Net Movement in Reg. Deferral	(46)	13	27	(409)	38	109	(78)	(149)	(115)	(177)	(120)
Net Movement in Regulatory Deferral	66	72	115	473	82	78	59	50	50	51	55
Non-recurring Gain	20	-	-	-	-	-	-	-	-	-	-
Net Income	<u>41</u>	<u>85</u>	<u>142</u>	<u>64</u>	<u>120</u>	<u>187</u>	<u>(19)</u>	<u>(99)</u>	<u>(66)</u>	<u>(126)</u>	<u>(65)</u>
Net Income Attributable to:											
Manitoba Hydro before Non-recurring Item	33	94	143	61	115	178	(29)	(111)	(69)	(128)	(68)
Non-recurring Gain	20	-	-	-	-	-	-	-	-	-	-
Manitoba Hydro	<u>53</u>	<u>94</u>	<u>143</u>	<u>61</u>	<u>115</u>	<u>178</u>	<u>(29)</u>	<u>(111)</u>	<u>(69)</u>	<u>(128)</u>	<u>(68)</u>
Non-controlling Interest	(12)	(8)	(1)	2	5	9	10	11	3	2	3
	<u>41</u>	<u>85</u>	<u>142</u>	<u>64</u>	<u>120</u>	<u>187</u>	<u>(19)</u>	<u>(99)</u>	<u>(66)</u>	<u>(126)</u>	<u>(65)</u>
* Additional Domestic Revenue			3.6%	0%	2.9%	??%					
Percent Increase		3.36%	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%
Cumulative Percent Increase		3.36%	7.05%	10.87%	14.82%	18.92%	23.16%	27.56%	32.11%	36.82%	41.70%
Financial Ratios											
Equity	16%	15%	14%	14%	13%	14%	13%	13%	12%	12%	12%
EBITDA Interest Coverage	1.51	1.54	1.64	1.58	1.62	1.69	1.58	1.52	1.57	1.53	1.58
Capital Coverage	1.53	1.40	1.35	1.18	1.41	1.64	1.33	1.27	1.24	1.12	1.20



ELECTRIC OPERATIONS
PROJECTED OPERATING STATEMENT
MIPUG Scenario December 21, 2017
(In Millions of Dollars)

For the year ended March 31

	2028	2029	2030	2031	2032	2033	2034	2035	2036
REVENUES									
Domestic Revenue at approved rates	1 599	1 614	1 630	1 647	1 673	1 701	1 729	1 757	1 786
additional*	747	839	936	1 038	1 152	1 273	1 401	1 538	1 682
BPIII Reserve Account	-	-	-	-	-	-	-	-	-
Extraprovincial	662	677	697	709	705	701	696	694	602
Other	36	37	38	38	39	40	40	40	41
	<u>3 045</u>	<u>3 167</u>	<u>3 301</u>	<u>3 433</u>	<u>3 569</u>	<u>3 714</u>	<u>3 866</u>	<u>4 029</u>	<u>4 111</u>
EXPENSES									
Operating and Administrative	595	607	620	633	646	660	674	688	702
Finance Expense	1 239	1 242	1 234	1 255	1 242	1 240	1 228	1 195	1 161
Finance Income	(16)	(21)	(19)	(15)	(16)	(17)	(22)	(23)	(25)
Depreciation and Amortization	765	776	790	805	822	840	857	872	888
Water Rentals and Assessments	132	132	132	133	133	133	134	134	134
Fuel and Power Purchased	131	134	138	147	129	128	134	143	133
Capital and Other Taxes	179	180	181	183	184	186	188	189	196
Other Expenses	79	84	87	87	89	91	92	95	96
Corporate Allocation	8	8	5	3	3	3	3	3	3
	<u>3 111</u>	<u>3 142</u>	<u>3 170</u>	<u>3 231</u>	<u>3 232</u>	<u>3 265</u>	<u>3 286</u>	<u>3 296</u>	<u>3 288</u>
Net Income before Net Movement in Reg. Deferral	(66)	25	131	202	337	449	580	733	823
Net Movement in Regulatory Deferral	57	61	67	69	72	75	76	76	75
Non-recurring Gain	-	-	-	-	-	-	-	-	-
Net Income	<u>(9)</u>	<u>86</u>	<u>197</u>	<u>271</u>	<u>409</u>	<u>525</u>	<u>655</u>	<u>809</u>	<u>899</u>
Net Income Attributable to:									
Manitoba Hydro before Non-recurring Item	(13)	81	190	261	398	512	641	793	883
Non-recurring Gain	-	-	-	-	-	-	-	-	-
Manitoba Hydro	<u>(13)</u>	<u>81</u>	<u>190</u>	<u>261</u>	<u>398</u>	<u>512</u>	<u>641</u>	<u>793</u>	<u>883</u>
Non-controlling Interest	4	5	8	10	11	13	14	15	16
	<u>(9)</u>	<u>86</u>	<u>197</u>	<u>271</u>	<u>409</u>	<u>525</u>	<u>655</u>	<u>809</u>	<u>899</u>
* Additional Domestic Revenue									
Percent Increase	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%	3.57%
Cumulative Percent Increase	46.76%	52.00%	57.42%	63.04%	68.85%	74.88%	81.12%	87.58%	94.27%
Financial Ratios									
Equity	12%	12%	13%	14%	15%	17%	19%	22%	25%
EBITDA Interest Coverage	1.63	1.72	1.82	1.87	2.01	2.11	2.25	2.42	2.56
Capital Coverage	1.29	1.39	1.57	1.61	1.81	1.95	2.12	2.12	2.21



**ELECTRIC OPERATIONS
PROJECTED BALANCE SHEET
MIPUG Scenario December 21, 2017
(In Millions of Dollars)**

For the year ended March 31

	ACTUAL										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
ASSETS											
Plant in Service	13 065	13 679	19 062	19 684	20 747	26 168	30 504	31 034	31 670	32 334	32 945
Accumulated Depreciation	(972)	(1 301)	(1 731)	(2 178)	(2 616)	(3 125)	(3 705)	(4 328)	(4 942)	(5 607)	(6 212)
Net Plant in Service	12 093	12 378	17 332	17 506	18 131	23 043	26 799	26 706	26 727	26 727	26 732
Construction in Progress	7 079	9 471	6 745	7 522	8 012	3 836	367	454	418	414	411
Current and Other Assets	1 773	1 915	2 199	2 477	2 505	1 928	1 682	1 681	1 628	1 770	1 744
Goodwill and Intangible Assets	327	541	782	926	1 348	1 302	1 256	1 211	1 167	1 123	1 081
Total Assets before Regulatory Deferral	21 272	24 305	27 057	28 431	29 997	30 109	30 103	30 051	29 940	30 035	29 969
Regulatory Deferral Balance	462	534	649	1 121	1 204	1 281	1 340	1 390	1 440	1 491	1 546
	21 733	24 839	27 706	29 552	31 200	31 390	31 443	31 442	31 380	31 526	31 515
LIABILITIES AND EQUITY											
Long-Term Debt	15 725	18 141	21 376	22 389	23 394	23 650	24 862	24 735	24 447	24 186	25 228
Current and Other Liabilities	3 204	3 643	3 047	3 816	4 359	4 147	3 027	3 184	3 468	3 993	2 998
Provisions	70	50	49	48	46	45	43	42	41	40	39
Deferred Revenue	450	465	491	520	542	551	561	571	582	593	603
BPIII Reserve Account	196	347	344	265	185	106	26	(0)	(0)	(0)	(0)
Retained Earnings	2 749	2 842	2 986	3 047	3 162	3 340	3 311	3 200	3 132	3 003	2 935
Accumulated Other Comprehensive Income	(709)	(699)	(636)	(580)	(537)	(497)	(437)	(339)	(338)	(337)	(337)
Total Liabilities and Equity before Regulatory Deferral	21 684	24 790	27 657	29 504	31 152	31 341	31 395	31 393	31 331	31 477	31 466
Regulatory Deferral Balance	49	49	49	49	49	49	49	49	49	49	49
	21 733	24 839	27 706	29 552	31 200	31 390	31 443	31 442	31 380	31 526	31 515
Net Debt	15 427	18 473	20 813	22 628	23 759	24 424	24 666	24 702	24 765	24 891	24 963
Total Equity	2 856	3 163	3 443	3 558	3 698	3 881	3 549	3 532	3 478	3 363	3 309
Equity Ratio	16%	15%	14%	14%	13%	14%	13%	13%	12%	12%	12%



**ELECTRIC OPERATIONS
PROJECTED BALANCE SHEET
MIPUG Scenario December 21, 2017
(In Millions of Dollars)**

For the year ended March 31

	2028	2029	2030	2031	2032	2033	2034	2035	2036
ASSETS									
Plant in Service	33 553	34 299	34 958	35 790	36 566	37 361	38 104	38 907	39 975
Accumulated Depreciation	(6 906)	(7 603)	(8 311)	(9 040)	(9 788)	(10 577)	(11 366)	(12 168)	(12 975)
Net Plant in Service	26 647	26 696	26 647	26 749	26 778	26 785	26 739	26 739	26 999
Construction in Progress	493	454	490	400	374	366	406	461	257
Current and Other Assets	2 012	2 450	2 194	2 054	2 443	2 521	3 066	3 434	4 183
Goodwill and Intangible Assets	1 040	1 001	962	924	885	848	810	773	736
Total Assets before Regulatory Deferral	30 192	30 601	30 294	30 127	30 480	30 519	31 020	31 407	32 175
Regulatory Deferral Balance	1 603	1 664	1 731	1 800	1 871	1 947	2 022	2 098	2 174
	31 795	32 265	32 025	31 927	32 351	32 465	33 043	33 505	34 349
LIABILITIES AND EQUITY									
Long-Term Debt	25 560	23 583	21 090	22 750	22 713	23 363	23 080	23 459	23 543
Current and Other Liabilities	2 949	5 307	7 361	5 332	5 386	4 329	4 539	3 819	3 685
Provisions	38	37	36	35	34	33	32	31	30
Deferred Revenue	615	624	634	644	654	665	676	687	699
BPIII Reserve Account	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Retained Earnings	2 922	3 002	3 192	3 453	3 851	4 363	5 004	5 798	6 680
Accumulated Other Comprehensive Income	(337)	(337)	(337)	(337)	(337)	(337)	(337)	(337)	(337)
Total Liabilities and Equity before Regulatory Deferral	31 747	32 216	31 976	31 878	32 302	32 417	32 994	33 456	34 300
Regulatory Deferral Balance	49	49	49	49	49	49	49	49	49
	31 795	32 265	32 025	31 927	32 351	32 465	33 043	33 505	34 349
Net Debt	24 971	24 899	24 713	24 476	24 091	23 592	22 950	22 221	21 403
Total Equity	3 310	3 396	3 594	3 863	4 269	4 789	5 439	6 242	7 134
Equity Ratio	12%	12%	13%	14%	15%	17%	19%	22%	25%



ELECTRIC OPERATIONS
PROJECTED CASH FLOW STATEMENT
MIPUG Scenario December 21, 2017
(In Millions of Dollars)

For the year ended March 31

	ACTUAL										
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
OPERATING ACTIVITIES											
Cash Receipts from Customers	1 901	2 152	2 164	2 160	2 352	2 550	2 699	2 777	2 878	2 833	2 936
Cash Paid to Suppliers and Employees	(555)	(892)	(843)	(870)	(885)	(894)	(904)	(916)	(934)	(934)	(948)
Interest Paid	(553)	(531)	(635)	(704)	(774)	(857)	(1 106)	(1 176)	(1 187)	(1 188)	(1 202)
Interest Received	17	5	11	22	26	19	6	4	6	5	7
	<u>810</u>	<u>734</u>	<u>697</u>	<u>608</u>	<u>718</u>	<u>817</u>	<u>695</u>	<u>690</u>	<u>763</u>	<u>715</u>	<u>792</u>
FINANCING ACTIVITIES											
Proceeds from Long-Term Debt	2 166	3 468	3 600	2 360	2 390	1 390	1 560	390	390	950	1 190
Sinking Fund Withdrawals	146	0	0	120	318	813	182	54	350	155	253
Sinking Fund Payment	(146)	(182)	(222)	(260)	(296)	(353)	(248)	(261)	(270)	(266)	(273)
Retirement of Long-Term Debt	(320)	(407)	(1 002)	(349)	(1 293)	(1 366)	(1 141)	(290)	(412)	(715)	(1 178)
Other	(5)	(10)	(10)	(11)	(11)	(11)	11	(5)	(5)	(5)	(5)
	<u>1 841</u>	<u>2 869</u>	<u>2 366</u>	<u>1 861</u>	<u>1 108</u>	<u>473</u>	<u>364</u>	<u>(111)</u>	<u>53</u>	<u>119</u>	<u>(13)</u>
INVESTING ACTIVITIES											
Property, Plant and Equipment, net of contributions	(2 925)	(3 659)	(3 002)	(2 391)	(1 760)	(1 368)	(898)	(720)	(724)	(752)	(776)
Other	(35)	(89)	(57)	(46)	(89)	(109)	(99)	(96)	(96)	(82)	(81)
	<u>(2 960)</u>	<u>(3 748)</u>	<u>(3 059)</u>	<u>(2 437)</u>	<u>(1 850)</u>	<u>(1 477)</u>	<u>(997)</u>	<u>(816)</u>	<u>(820)</u>	<u>(834)</u>	<u>(858)</u>
Net Increase (Decrease) in Cash	(309)	(146)	4	31	(23)	(187)	62	(237)	(3)	(0)	(78)
Cash at Beginning of Year	943	634	488	492	523	500	313	375	138	135	134
Cash at End of Year	<u>634</u>	<u>488</u>	<u>492</u>	<u>523</u>	<u>500</u>	<u>313</u>	<u>375</u>	<u>138</u>	<u>135</u>	<u>134</u>	<u>56</u>



ELECTRIC OPERATIONS
PROJECTED CASH FLOW STATEMENT
MIPUG Scenario December 21, 2017
(In Millions of Dollars)

For the year ended March 31

	2028	2029	2030	2031	2032	2033	2034	2035	2036
OPERATING ACTIVITIES									
Cash Receipts from Customers	3 032	3 154	3 287	3 419	3 555	3 700	3 851	4 014	4 097
Cash Paid to Suppliers and Employees	(963)	(979)	(996)	(1 019)	(1 015)	(1 028)	(1 049)	(1 073)	(1 083)
Interest Paid	(1 216)	(1 232)	(1 239)	(1 246)	(1 226)	(1 237)	(1 224)	(1 210)	(1 175)
Interest Received	14	28	27	15	12	23	30	41	41
	867	972	1 079	1 169	1 326	1 458	1 609	1 773	1 880
FINANCING ACTIVITIES									
Proceeds from Long-Term Debt	390	390	1 970	3 990	2 350	1 940	1 160	1 100	570
Sinking Fund Withdrawals	150	60	510	540	0	230	51	10	463
Sinking Fund Payment	(274)	(282)	(291)	(278)	(266)	(276)	(274)	(282)	(289)
Retirement of Long-Term Debt	(150)	(60)	(2 440)	(4 396)	(2 373)	(2 390)	(1 284)	(1 487)	(665)
Other	(5)	(5)	(5)	(5)	(5)	(7)	(4)	(4)	(5)
	111	103	(256)	(149)	(294)	(503)	(351)	(663)	74
INVESTING ACTIVITIES									
Property, Plant and Equipment, net of contributions	(787)	(818)	(813)	(852)	(860)	(877)	(890)	(968)	(986)
Other	(80)	(74)	(72)	(73)	(72)	(71)	(70)	(68)	(67)
	(867)	(893)	(884)	(925)	(933)	(948)	(960)	(1 036)	(1 053)
Net Increase (Decrease) in Cash	111	182	(62)	96	99	7	298	75	901
Cash at Beginning of Year	56	167	348	287	383	482	489	787	862
Cash at End of Year	167	348	287	383	482	489	787	862	1 763



**Manitoba Hydro 2019/20 Electric Rate Application
PUB/MH I-62b-g**

REFERENCE:

2017/18 GRA PUB/MH I-3a; Application pg. 1 and 2

PREAMBLE TO IR (IF ANY):

QUESTION:

- b) Provide the net present value of the proposed annualized revenue rate increase of 3.5%. Utilize Manitoba Hydro's weighted average cost to capital.
- c) Provide the rate increase required to provide Manitoba Hydro with the same net income for 2019/20 if the rate increase is not implemented until May 1, 2019.
- d) Provide the rate increase required to provide Manitoba Hydro with the same net income for 2019/20 if the rate increase is not implemented until June 1, 2019?
- e) Provide the amount of foregone revenue if the requested 3.5% rate increase is implemented on May 1, 2019 instead of April 1, 2019.
- f) Provide the amount of foregone revenue if the requested 3.5% rate increase is implemented on June 1, 2019 instead of April 1, 2019.
- g) Provide the amount of foregone revenue if the requested 3.5% rate increase is implemented on July 1, 2019, instead of April 1, 2019.

RESPONSE:

- b) The present value of the proposed annualized revenue associated with the proposed rate increase of 3.5% is \$618 million (at 6.00% nominal WACC discount rate).



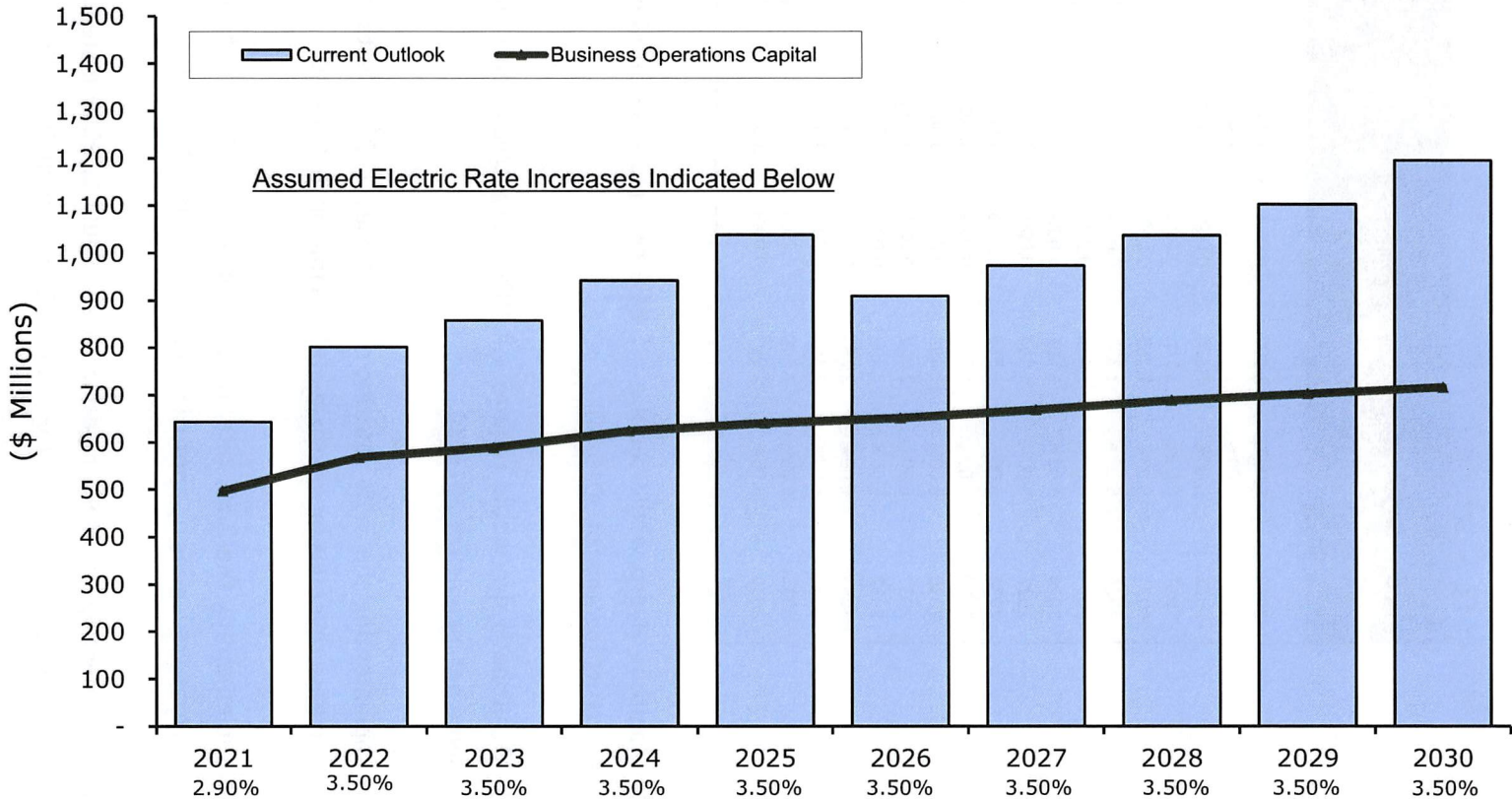
**Manitoba Hydro 2019/20 Electric Rate Application
PUB/MH I-62b-g**

In Millions of Dollars

	Nominal WACC	Discount Factor	Effective Annual Rate Increases	Effective Cumulative Rate Increases	Additional Domestic Revenue	Discounted Additional Domestic Revenue
2019	6.00%	1.000	0.00%	0.00%	\$0	\$0
2020	6.00%	1.060	3.50%	3.50%	59	55
2021	6.00%	1.124	0.00%	3.50%	58	52
2022	6.00%	1.191	0.00%	3.50%	58	49
2023	6.00%	1.262	0.00%	3.50%	58	46
2024	6.00%	1.338	0.00%	3.50%	57	43
2025	6.00%	1.419	0.00%	3.50%	57	40
2026	6.00%	1.504	0.00%	3.50%	57	38
2027	6.00%	1.594	0.00%	3.50%	57	36
2028	6.00%	1.689	0.00%	3.50%	58	34
2029	6.00%	1.791	0.00%	3.50%	58	33
2030	6.00%	1.898	0.00%	3.50%	59	31
2031	6.00%	2.012	0.00%	3.50%	60	30
2032	6.00%	2.133	0.00%	3.50%	61	28
2033	6.00%	2.261	0.00%	3.50%	62	27
2034	6.00%	2.397	0.00%	3.50%	63	26
2035	6.00%	2.540	0.00%	3.50%	64	25
2036	6.00%	2.693	0.00%	3.50%	65	24
NPV						\$618

- c) Manitoba Hydro would require a 3.84% rate increase on May 1, 2019 to achieve the same net income for 2019/20.
- d) Manitoba Hydro would require a 4.18% rate increase on June 1, 2019 to achieve the same net income for 2019/20.
- e) Implementing the 3.5% rate increase on May 1, 2019 instead of April 1, 2019 would decrease revenues by approximately \$5 million in 2019/20.
- f) Implementing the 3.5% rate increase on June 1, 2019 instead of April 1, 2019 would decrease revenues by approximately \$9 million in 2019/20.
- g) Implementing the 3.5% rate increase on July 1, 2019 instead of April 1, 2019 would decrease revenues by approximately \$13 million in 2019/20.

Cash Flow from Operations





2021/22 Interim Rate Application

1 Figure 18: Revenue Requirement Impact of Major Capital Projects

	2021/22	2022/23	2023/24
(\$ millions)			
Keeyask	282	499	526
Bipole III	327	316	316
MMTP	30	29	29
GNTL	66	64	64
Birtle	3	3	3
Gross Impact	708	912	938
Amort of Major Capital Projects Deferral*	(12)	(50)	(37)
Amort of Bipole III Reserve*	(77)	(77)	(20)
Net Impact	619	785	881

2
 3 **Amortization of Capital Reserves projected to cease in 2023/24*

4
 5 Manitoba Hydro has been projecting rate increases of at least 3.5% per year since
 6 2009, primarily as a result of the increasing costs associated with the major capital
 7 projects that are now coming in-service. ***In addition to the very significant financial***
 8 ***impact of the current drought, the proposed general revenue increase is required as***
 9 ***a result of the substantial increases in Manitoba Hydro's revenue requirement due***
 10 ***to the major capital projects.***

11
 12 **4.3 Major Capital Projects Deferral**

13 As part of this Application, Manitoba Hydro is requesting approval to begin
 14 recognizing the revenues from the Major Capital Projects Deferral established by the
 15 PUB in Order 69/19 commencing January 1, 2022, with the balance to be amortized
 16 over 24 months to help offset a small portion of the additional revenue requirement
 17 associated with the major capital projects (\$12 million in 2021/22).

18
 19 In Order 69/19, the PUB approved a 2.5% rate increase effective June 1, 2019 and
 20 directed all revenues from this increase to be placed in a Major Capital Projects
 21 Deferral account to help mitigate rate increases when the new major projects are
 22 placed in-service. As several major capital projects have entered service since this
 23 deferral account was established (i.e. MMTP, Birtle, GNTL & 5 units of Keeyask),
 24 Manitoba Hydro is proposing to amortize the balance in the Major Capital Projects
 25 Deferral, expected to be approximately \$100 million as of December 31, 2021, over a
 26 24-month period commencing on January 1, 2022. The proposed 24-month



2021/22 Interim Rate Application

1 amortization period is a similar timeframe over which the revenues in this account
 2 were collected from customers.

3
 4 Figure 19 provides the balance and revenue recognized in 2021/22 through 2023/24
 5 based on the proposed 24-month amortization period.

6
 7 Figure 19: Major Capital Projects Deferral Balance and Revenue Recognition

(\$ millions)	2021/22	2022/23	2023/24
Opening Balance	71	87	37
Revenue Deferral of June 2019 2.5% Rate Increase	29	0	0
Revenue Recognition of June 2019 2.5% Rate Increase	(12)	(50)	(37)
Closing Balance	\$87	\$37	\$0

8
 9 The proposed amortization period will allow Manitoba Hydro to recognize \$12 million
 10 in revenue in 2021/22, a further \$50 million in 2022/23, and \$37 million in 2023/24.

11 For additional information on the deferrals and proposed amortization of the Major
 12 Capital Projects Deferral, please see the response to PUB MFR 10. Manitoba Hydro
 13 notes that while the Major Capital Projects Deferral helps offset a portion of the
 14 substantial increase in revenue requirement from the major projects being placed in-
 15 service, these revenues were collected starting in 2019 and were utilized to help offset
 16 borrowings at that time and as such do not improve Manitoba Hydro's current cash
 17 flow. The combination of the amortization of the Major Capital Projects Deferral and
 18 the Bipole III Deferral reduces overall revenue requirement by \$89 million in 2021/22,
 19 \$127 million 2022/23, and \$57 million in 2023/24, as shown in Figure 18. After
 20 2023/24, both deferrals accounts will be fully amortized and will no longer provide an
 21 offset to revenue requirement in future years.

22
 23 Consistent with the treatment of the Bipole III Deferral Account, Manitoba Hydro
 24 would cease funding the Major Capital Project Deferral effective December 31, 2021,
 25 and the revenues previously deferred will flow to Manitoba Hydro's general revenues.

26
 27 **4.4 Keeyask In-Service Deferral**

28 The Keeyask In-Service Deferral was established by Manitoba Hydro in 2020/21 to
 29 ensure that for rate setting purposes, the Corporation's accounting treatment is

Manitoba Hydro's 2021/22 Interim Rate Application
 PUB MFR 8
 Financial Results and Forecasts

PUB MFR 8

Financial Results and Forecasts

A table that shows the incremental and cumulative impacts to retained earnings of a 5- and 7-year drought, beginning in 2021/22. [2017/18 GRA PUB/MH II-40].

Manitoba Hydro does not currently have a long-term financial forecast or long-term underlying forecasts such as the electric load forecast and export price forecast, therefore this response has been prepared with provisional information for the period following 2022/23.

The response is limited to the impacts of drought on flow related revenues and costs and does not include impacts to borrowing or retained earnings.

Manitoba Hydro's methodology for the calculation of the drought impact is based on the difference in net extraprovincial revenues over the flow years of a representative drought with respect to the net extraprovincial revenues based on the average of all flow cases used in the simulation. The flow years, 1987/88 to 1991/92, inclusive, constitutes the representative 5-year drought. Flow years, 1936/37 to 1942/43, inclusive, make up the representative 7-year drought. For the analysis summarized in Table 1, the first year of each representative drought sequence is replaced by 2021/22 which is composed of actual flows and hydraulic generation through September 2021 and, projected flows for the remainder of the year.

Table 1 below provides the net extraprovincial revenue impacts (excluding financing costs) of a 5-year and a 7-year drought, with onset of the drought in 2021/22.

Drought Duration	Fiscal Years	Flow Years	Net Extraprovincial Revenue Impact [billions of nominal \$ CDN] (Excluding Finance Expense)
5 years	2021/22-2025/26	2021/22 Forecast, 1988/89-1991/92	\$ 1.3
7 years	2021/22-2027/28	2021/22 Forecast, 1937/38-1942/43	\$ 1.8

Manitoba Hydro's 2021/22 Interim Rate Application
PUB MFR 8
Financial Results and Forecasts

Manitoba Hydro's Application provides information on the additional borrowings required to fund core operations in 2021/22 of \$348 million, as a result of the financial impact of the drought. While Manitoba Hydro is unable to quantify the finance expense impact of a prolonged drought at this time, the impacts would be significant and would occur over the period advancing the requirements and level of incremental debt and associated finance expense. In addition, it is important to recognize that retained earnings are not a cash reserve, as demonstrated by incremental borrowings in the current year. Absent of any rate relief, retained earnings will deteriorate due to the annual net losses and debt will increase as a result of additional borrowings needed to finance the cash flow deficiencies. This would place considerable upward pressure on the debt ratio that is already high as the major capital projects near completion. As such, retained earning alone are not sufficient to address the financial impact of the uncertainties faced by Manitoba Hydro.



**Manitoba Hydro 2017/18 & 2018/19 General Rate Application
PUB/MH II-40**

REFERENCE:

PUB/MH I-48

PREAMBLE TO IR (IF ANY):

QUESTION:

Please provide a table that compares the drought sensitivities to the MH16 Update with Interim assuming 5 year and 7 year drought conditions, beginning in 2019/20 and in 2022/23 (post-Keeyask in service), based on MH16-Updated with Interim, but with 3.95% rate increases beginning 2018/19 and continuing through the five and seven year periods. Please include the forecast retained earnings for each year as well as the change in retained earnings compared to MH16-U with Interim. That is, please re-file the table in PUB/MH I-48 except based on 3.95% rate increases and also showing the forecast retained earnings in each year. Please also provide the four IFF scenarios including financial ratios that support the table.

RATIONALE FOR QUESTION:

RESPONSE:

The following tables compare the 5 and 7 year drought sensitivities to (1) MH16 Update with Interim but with 3.95% rate increases beginning in 2018/19 and continuing through the five and seven year periods, and (2) MH16 Update with Interim and 7.90% rate increases to 2023/24, followed by 4.54% and 2.00% thereafter (as provided in PUB/MH-I-48b).

Financial statements including financial ratios for the four drought scenarios with 3.95% base rate increases have also been provided below.



Manitoba Hydro 2017/18 & 2018/19 General Rate Application
 PUB/MH II-40

Figure 1

Cumulative Impact to MH16 Update with Interim and 3.95% Retained Earnings

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
Base Scenario: Total Retained Earnings										
MH16 Update with Interim and 3.95%	3 056	3 181	3 375	3 368	3 210	3 106	2 955	2 879	2 877	2 992
Sensitivities: Total Retained Earnings										
5 Year Drought (starting in 2019/20)	2 708	2 424	2 446	2 195	1 825					
7 Year Drought (starting in 2019/20)	2 902	2 937	2 964	2 653	1 849	1 422	1 115			
5 Year Drought (starting in 2022/23)				3 093	2 529	2 213	1 774	1 444		
7 Year Drought (starting in 2022/23)				3 227	2 959	2 649	2 134	1 372	959	888
Sensitivities: Incremental Increase/(Decrease) in Retained Earnings										
5 Year Drought (starting in 2019/20)	(348)	(757)	(929)	(1 173)	(1 386)					
7 Year Drought (starting in 2019/20)	(154)	(244)	(411)	(716)	(1 361)	(1 684)	(1 840)			
5 Year Drought (starting in 2022/23)				(275)	(682)	(893)	(1 181)	(1 435)		
7 Year Drought (starting in 2022/23)				(141)	(251)	(457)	(821)	(1 507)	(1 918)	(2 105)

Figure 2

Cumulative Impact to MH16 Update with Interim and 7.90% for 6, 4.54%, 2.00% Retained Earnings

	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
Base Scenario: Total Retained Earnings										
MH16 Update with Interim 7.90% for 6, 4.54%, 2.00%	3 258	3 606	4 124	4 557	4 969	5 498	5 987	6 564	7 214	7 969
Sensitivities: Total Retained Earnings										
5 Year Drought (starting in 2019/20)	2 909	2 849	3 195	3 382	3 581					
7 Year Drought (starting in 2019/20)	3 104	3 362	3 713	3 842	3 611	3 826	4 170			
5 Year Drought (starting in 2022/23)				4 283	4 289	4 616	4 828	5 157		
7 Year Drought (starting in 2022/23)				4 416	4 717	5 044	5 177	5 072	5 322	5 911
Sensitivities: Incremental Increase/(Decrease) in Retained Earnings										
5 Year Drought (starting in 2019/20)	(349)	(758)	(929)	(1 175)	(1 388)					
7 Year Drought (starting in 2019/20)	(154)	(244)	(411)	(716)	(1 358)	(1 672)	(1 817)			
5 Year Drought (starting in 2022/23)				(274)	(680)	(882)	(1 159)	(1 407)		
7 Year Drought (starting in 2022/23)				(142)	(252)	(455)	(810)	(1 492)	(1 892)	(2 059)

A prolonged period of low water flows would have a significant financial impact on Manitoba Hydro as demonstrated in the tables above. For example, regardless of the underlying domestic rate increases, a 7 year drought starting in 2022/23 would reduce the Corporation's retained earnings by approximately \$2.1 billion by the end of the 7 year period (2028/29).



**2021/22 Interim Rate Application
COALITION/MH I-4a-b**

REFERENCE:

Application Pages 6, 7 and 51, PUB MFR 9 & Coalition MFR 23

PREAMBLE TO IR (IF ANY):

On Page 51 of the Application, Manitoba Hydro states that “The corporation has thoroughly demonstrated that the proposed general revenue increase is required to address the unexpected costs due to the drought, including the annual carrying costs on the borrowings of \$348 million...In addition, as has long been projected, Manitoba Hydro now faces increased carrying costs with the major capital projects that are now being placed in-service. These costs are increasing Manitoba Hydro’s revenue requirement by \$619 million in 2021/22...the proposed 5.0% general revenue increase, which is aligned with the increase approved by the PUB following the last drought in 2004...”

On Page 6 of the Application, Manitoba Hydro states “The interest costs on the borrowings...will amount to an estimated annual cost of \$13 million per year or nearly equivalent to a 0.8% of an electric rate increase.”

In Coalition MFR 23, Manitoba Hydro states “... as set out in Section 1.3 of the Application, this interim rate application is driven by deterioration of the Corporation’s financial health caused by the current drought conditions and upward pressure on Manitoba Hydro’s revenue requirements associated with several major capital projects being placed in-service.”

On Page 7 of the Application, Manitoba Hydro states that “...when considering the level of increase to request in this Application, Manitoba Hydro considered the following: The need to preserve intergenerational equity, by recovering the carrying costs on the additional borrowings...in 2021/22, as these costs should not be deferred to be recovered from future customers; and...The need for rate stability and predictability for customers. Manitoba Hydro has been projecting the need for annual rate increases of at least 3.5% since 2009.”



**2021/22 Interim Rate Application
COALITION/MH I-4a-b**

QUESTION:

- a) Please reconcile the requested interim rate increase of 5.0% with the estimated carrying costs of the drought of approximately an 0.8% rate increase.
- b) Please elaborate on why Manitoba Hydro considers a one-year drought event as an intergenerational equity issue between current and future customers – particularly when considering that Manitoba Hydro has received (and past and current customers have paid) rate increases in 16 out of the last 17 years of better than average water flows, based on forecasts in these rate applications that used a 100+ years of water flow conditions as an assumption (which inherently includes low flow and drought considerations).

RESPONSE:

- a) The current drought conditions have very significantly impacted Manitoba Hydro's financial position in 2021/22. The 2021/22 Forecast projects a reduction in net extraprovincial revenues of \$398 million compared to the 2021/22 Budget. As a result, Manitoba Hydro must borrow \$348 million in 2021/22 to fund core operations, which represents 90% of the projected loss in net extraprovincial revenue. Manitoba Hydro believes the proposed 5% rate increase is modest given the severe impact of the present drought; 0.8% of this increase is necessary just to cover the annual interest costs of \$13 million on borrowings required in 2021/22 to fund core operations.

Since 2009, Manitoba Hydro has been projecting the need for annual rate increases of at least 3.5% each year. These projected increases considered the significant revenue requirement impacts that would occur when the Major Capital Projects are placed in-service, which impacts are now coming to fruition as MMTP, the Birtle Transmission Line, GNLT, and five of seven units of the Keeyask Generating Station have been placed in-service. In 2021/22, Manitoba Hydro's projected revenue requirement associated with the Major Capital Projects will reach \$619 million.

Manitoba Hydro's 2021/22 Budget assumed a range of water flow conditions for the year based on the 40-years of historic flows and assumed 3.5% rate increase effective October 1, 2021. The 2021/22 Budget projected sufficient earnings and cash flow to



**2021/22 Interim Rate Application
COALITION/MH I-4a-b**

avoid borrowing to fund core business activities, an EBITDA interest coverage ratio just under 1.7, maintained the debt ratio at 86% and prevented interest paid as a percentage of total revenue from exceeding 40%. As the drought conditions developed and became more severe into the late fall, it became obvious that the budgeted 3.5% rate increase was no longer sufficient to support Manitoba Hydro's deteriorating financial health.

It is important to note that even with the proposed modest 5.0% increase, given the extreme circumstances of the drought and the significant financial impact to Manitoba Hydro, the 2021/22 Forecast projects a (\$190) million net loss, a 1% deterioration of the debt ratio to 87%, an EBITDA interest coverage ratio of 1.36 (from 1.68) and interest paid as a percentage of total revenue of 42% (from 40%).

Manitoba Hydro believes the proposed 5% rate increase is modest given the current circumstances and is fully required to address the very severe impact of the present drought and avoid further deterioration of the financial health of the utility at a time when, as has been predicted for the last decade, revenue requirement is now increasing rapidly as major capital projects are put in service.

- b) Manitoba Hydro views the significant borrowings required to fund core operations in 2021/22 to be an issue that merits consideration of intergenerational equity, among other regulatory principles. Where just and reasonable, costs incurred to serve customers in a given period should be paid by the customers who receive that service.

While water conditions have been above average for the past several years and contributed to higher retained earnings, the borrowings required to fund core operations this year as a result of the drought demonstrate the simple fact that retained earnings are not a cash reserve. Throughout the capital expansion, the Corporation's investing activities have exceeded the cash flow from operations required by the Corporation. Given that the cash flow requirements are being met through borrowing, Manitoba Hydro has not maintained a balance in the sinking fund since 2016 and has no plans or capacity to do so in 2021/22 or 2022/23.



**2021/22 Interim Rate Application
COALITION/MH I-4a-b**

Manitoba Hydro's balance sheet is highly leveraged with a projected equity ratio of 87.0% in 2021/22 and 87.6% in 2022/23, which restricts the corporation's financial flexibility to respond to unexpected events. A weakening of Manitoba Hydro's financial metrics, if not supported by rate increases to temper the impacts of the drought, may lead credit rating agencies to no longer view Manitoba Hydro as self-supporting, and may result in a credit rating downgrade(s) to the Province. This rating action would result in additional financing costs for both the Province and Manitoba Hydro, which would be borne by taxpayers and Manitoba Hydro's customers for years to come.

Manitoba Hydro lacks material liquid assets to meet the risk of future losses. Even modest reductions in revenue require additional cash borrowing which further strains and deteriorates the financial health of Manitoba Hydro. This is evident in the current drought, where Manitoba Hydro is required to borrow \$348 million (90% of the expected reduction in net extraprovincial revenue) in order to fund operations in 2021/22.

In Order 59/18, the PUB noted that it is prepared to consider regulatory action when required to address emerging risks facing Manitoba Hydro, specifically referencing a drought situation that Manitoba Hydro has just experienced. The proposed 5% rate increase is modest given the very severe impact of the present drought while reasonably balancing the impact to customers. Part of this increase is required to recover the annual interest costs on these borrowings to avoid an unfair burden from being shifted to future customers.



2021/22 Interim Rate Application

1 amortization period is a similar timeframe over which the revenues in this account
 2 were collected from customers.

3
 4 Figure 19 provides the balance and revenue recognized in 2021/22 through 2023/24
 5 based on the proposed 24-month amortization period.

6
 7 Figure 19: Major Capital Projects Deferral Balance and Revenue Recognition

(\$ millions)	2021/22	2022/23	2023/24
Opening Balance	71	87	37
Revenue Deferral of June 2019 2.5% Rate Increase	29	0	0
Revenue Recognition of June 2019 2.5% Rate Increase	(12)	(50)	(37)
Closing Balance	\$87	\$37	\$0

8
 9 The proposed amortization period will allow Manitoba Hydro to recognize \$12 million
 10 in revenue in 2021/22, a further \$50 million in 2022/23, and \$37 million in 2023/24.
 11 For additional information on the deferrals and proposed amortization of the Major
 12 Capital Projects Deferral, please see the response to PUB MFR 10. Manitoba Hydro
 13 notes that while the Major Capital Projects Deferral helps offset a portion of the
 14 substantial increase in revenue requirement from the major projects being placed in-
 15 service, these revenues were collected starting in 2019 and were utilized to help offset
 16 borrowings at that time and as such do not improve Manitoba Hydro's current cash
 17 flow. The combination of the amortization of the Major Capital Projects Deferral and
 18 the Bipole III Deferral reduces overall revenue requirement by \$89 million in 2021/22,
 19 \$127 million 2022/23, and \$57 million in 2023/24, as shown in Figure 18. After
 20 2023/24, both deferrals accounts will be fully amortized and will no longer provide an
 21 offset to revenue requirement in future years.

22
 23 Consistent with the treatment of the Bipole III Deferral Account, Manitoba Hydro
 24 would cease funding the Major Capital Project Deferral effective December 31, 2021,
 25 and the revenues previously deferred will flow to Manitoba Hydro's general revenues.

26
 27 **4.4 Keeyask In-Service Deferral**

28 The Keeyask In-Service Deferral was established by Manitoba Hydro in 2020/21 to
 29 ensure that for rate setting purposes, the Corporation's accounting treatment is



2021/22 Interim Rate Application

1 consistent with its past accounting practice of recognizing expenses (i.e. depreciation
2 and finance expense) associated with the generating station on a per-unit basis, as
3 each unit is placed in service.

4
5 Under the previous Canadian Generally Accepted Accounting Principles (“CGAAP”)
6 method used by Manitoba Hydro, depreciation and finance expense costs were
7 recognized in revenue requirement on a per unit of output basis (i.e. costs recognized
8 equally based on the number of generating unit’s in-service). When applied to the
9 Keeyask generating station which has 7 turbine units, Manitoba Hydro’s past practice
10 would recognize into service 1/7 of the total asset value for all generating station
11 assets completed and available for use (i.e. power house, dams, spillway and water
12 control structures). As 1/7 of the asset costs are placed into service, Manitoba Hydro
13 would recognize 1/7 of the depreciation and finance costs. The per generating unit
14 method was used by Manitoba Hydro for the in-service of its past generating stations,
15 most recently for Wuskwatim (2012) and allows for the matching of the timing of the
16 recognition of depreciation and finance expense on the plant assets with the timing
17 of the recognition of the revenue brought on with each turbine going into service.

18
19 Under International Financial Reporting Standards (IFRS) assets are to be placed in-
20 service when they are recognized as being used and useful. This accounting standard
21 results in a significant increase in the assets placed in-service with the first turbine
22 unit (i.e. powerhouse, dams, spillway and water control) and a decrease in the assets
23 placed in-service with the subsequent 6 turbine units (i.e. unit specific assets)
24 compared to Manitoba Hydro’s past accounting practice. At each in-service,
25 depreciation and finance expense on the related assets are recognized into net
26 income.

27
28 In order to provide a consistent approach in the timing of the recognition of
29 depreciation and finance expense costs that are included in revenue requirement,
30 Manitoba Hydro established the Keeyask In-Service Regulatory Deferral to capture the
31 annual differences in depreciation and finance expense between the two methods.
32 When the 7th and final turbine unit is in-service, there will no longer be a difference
33 in the depreciation and finance expense between Manitoba Hydro’s previous



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1 accounting practice and IFRS, and the balance in the Keeyask In-Service Deferral will
2 commence amortization over the average service life (95 years) of the installed assets.

3
4 In 2021/22, the forecast additions to the Keeyask In-Service Deferral are \$73.6 million
5 in deferred finance and depreciation expense, that would otherwise have been
6 included in revenue requirement during this year. For additional information on the
7 additions to the Keeyask In-Service Deferral, please see the response to PUB MFR 7.

8
9 **5.0 COST ALLOCATION AND CUSTOMER BILL IMPACTS**

10
11 A cost of service (“COS”) study is used to determine each customer class’s share of
12 the Corporation’s revenue requirement and is considered the primary vehicle for
13 evaluating the appropriateness of overall cost responsibility and price level by
14 customer class.

15
16 The results of the study indicate the degree to which each rate class’s allocated costs
17 are being recovered through revenues collected from the class. The ratio of class
18 revenues and costs is referred to as Revenue Cost Coverage (“RCC”). In Manitoba, to
19 the extent that a customer class’s RCC falls within a range of 95% to 105%, known as
20 the Zone of Reasonableness (“ZOR”), it is accepted that its revenues are recovering
21 the allocated cost.

22
23 Manitoba Hydro’s most recently completed study, PCOSS21, is being used to guide
24 the rate increases being proposed by customer class.

25
26 **5.1 Summary of PCOSS21**

27 PCOSS21, PUB MFR 20 – Attachment 1 was completed using largely the same
28 methodology as PCOSS18 with the updates noted below:

29 *Per Direction in 59/18*

- 30
- Net Export Revenue has been treated as a reduction of class cost rather than
31 an addition to class revenue in the calculation of class RCCs.
 - Non-tariffable transmission is excluded from the allocation of Net Export
32 Revenue.
- 33

The following Management's Discussion and Analysis (MD&A) provides comments on the financial results of Manitoba Hydro (the corporation) for the year ended March 31, 2021 with comparative information where applicable. The MD&A also provides an assessment of corporate risks and contains forward-looking statements regarding conditions and events which may affect financial performance in the future. Such forward-looking statements are subject to a number of uncertainties which are likely to cause actual results to differ from those anticipated. For context, the MD&A should be read in conjunction with the consolidated financial statements and notes. The fiscal 2021 financial information discussed below has been prepared in accordance with International Financial Reporting Standards (IFRS).

Summary of Consolidated Results

Consolidated Statement of Income

Manitoba Hydro's consolidated net income from electricity and natural gas operations for the fiscal year ended March 31, 2021 was \$119 million compared to \$99 million in the previous fiscal year. Net income increased by \$20 million primarily as a result of higher extraprovincial revenues due to new firm dependable sales contracts made possible by the construction of the Keeyask Generating Station partially offset by lower spot market prices. This increase in net income was partially offset by costs associated with the in-service of the 500 kV transmission interconnection to the U.S. as well as higher operating and administrative expenses due to an increase in employee benefit costs.

The first unit of the Keeyask Generating Station was placed in-service during 2020-21 which contributed to higher financing costs as a portion of the interest costs can no longer be capitalized following the in-service of the first unit as well as higher depreciation expense. However, these costs were mainly offset through net movement in regulatory deferral balances as a result of the establishment of the Keeyask in-service deferral to align with the method used for rate-setting purposes.

During 2020-21, the corporation was faced with the unprecedented event of a global pandemic. In response to COVID-19, government authorities introduced various recommendations and measures to try to limit the spread of the pandemic which caused disruptions to businesses, resulting in an economic downturn. While these government measures and economic conditions had an effect on the corporation's operations, they did not have a significant impact on net income. During the year, the corporation provided support to its customers with measures including deferral of utility bill payments as well as temporarily suspending customer disconnections. These measures resulted in delays in the collection of amounts due from customers as well as marginally higher expected credit losses from customers. Another economic impact of COVID-19 was a decline in domestic usage by commercial and industrial customers which was partially offset by higher usage by residential customers. Other impacts on the corporation included higher interest costs due to timing of borrowings to ensure liquidity in response to market disruptions caused by COVID-19 as well as reductions in spot market prices resulting from the economic slowdown.

To help offset these impacts, the corporation implemented cost reduction measures to support the government cost savings initiative in their response to the pandemic.

Regulatory deferral account balances usually represent timing differences between the recognition of items of income or expenses for regulatory purposes and the recognition of those items for financial reporting purposes. Regulatory deferral account balances arising from rate-regulated activities are recognized and measured separately if they do not meet the criteria to be recognized as an asset or liability in accordance with other standards. The balances are recorded as regulatory deferral balances when there is sufficient evidence that they will be recovered or refunded in future rates. Sufficient evidence includes approvals by the regulator and past practice. These amounts would otherwise have been included in the determination of net income in the year they are incurred.

Under rate regulation, the prices charged for the sale of electricity and natural gas within Manitoba are subject to review and approval by the Public Utilities Board of Manitoba (PUB). The rate-setting process is designed such that rates charged to electricity and natural gas customers recover costs incurred by Manitoba Hydro in providing electricity and natural gas service plus a sufficient contribution to retained earnings.

The following regulatory deferral account balances are initially recorded at cost and amortized on a straight-line basis using the specified periods:

Demand side management (DSM) programs	10	years
Site remediation costs	15	years
Deferred taxes	30	years
Acquisition costs	30	years
Regulatory costs	up to 5	years
Ineligible overhead	34	years
Conawapa	30	years
Bipole III deferral	5	years
Change in gas meter depreciation rate	5	years
Impact of 2014 depreciation study	5	years
Meter exchange costs	3	years

The Affordable Energy Fund is amortized to the consolidated statement of income at the same rate as the obligation is drawn down. The Purchased Gas Variance Account (PGVA) is recovered or refunded over a period determined by the PUB.

The amortization period for the loss on retirement or disposal of assets, change in depreciation methodologies from average service life (ASL) to equal life group (ELG), major capital project deferral and the impact of the 2019 depreciation study will be determined at a future regulatory proceeding.

The Keeyask in-service deferral has been established based on Manitoba Hydro's past practice of recognizing expenses associated with the generating station on a per-unit basis for rate-setting purposes. The corporation will seek regulatory approval for this deferral and the associated amortization at a future regulatory proceeding.

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PUB MFR 7

Financial Results and Forecasts

Detail of the Net Movement in Regulatory Deferral Accounts including Opening and Closing Balances, Additions, and Amortizations. [2019 GRA - PUB/MH 10 a-c]

Please see the following for a continuity schedule providing the opening and closing balances, additions and amortization for each regulatory deferral account, including 2020/21 Actuals, 2021/22 Forecast and 2022/23 Preliminary Plan.

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Manitoba Hydro			
2021/22 Interim Rate Application			
(In thousands of dollars)			
	Actuals	Forecast	Preliminary Plan
	2020/21	2021/22	2022/23
Opening balance of net regulatory deferral			
DSM programs	272 065	257 307	273 142
Site remediation	38 213	43 426	54 704
Regulatory costs	6 988	2 246	2 484
Acquisition costs	7 712	7 020	6 328
Change in depreciation method	198 728	240 120	287 508
Deferred ineligible overhead	113 179	129 517	145 262
Loss on retirement or disposal of assets	35 463	71 388	73 888
Affordable Energy Fund	3 825	3 781	3 781
Conawapa	353 950	341 323	328 696
Keeyask in-service deferral	-	15 935	89 526
DSM deferral debit balance	48 800	48 800	48 800
DSM deferral credit balance	(48 800)	(48 800)	(48 800)
Bipole III deferral	(252 169)	(174 771)	(97 373)
Major capital project deferral	(32 515)	(70 518)	(86 833)
	<u>745 439</u>	<u>866 774</u>	<u>1 081 113</u>
Additions to regulatory deferral accounts			
DSM programs	27 786	58 318	59 129
Site remediation	9 920	16 208	15 200
Regulatory costs	561	2 321	4 097
Acquisition costs	-	-	-
Change in depreciation method	41 392	47 388	54 721
Deferred ineligible overhead	20 200	20 200	20 200
Loss on retirement or disposal of assets	35 925	2 500	2 500
Affordable Energy Fund	43	-	-
Conawapa	-	-	-
Keeyask in-service deferral	15 935	73 591	14 063
DSM deferral debit balance	-	-	-
DSM deferral credit balance	-	-	-
Bipole III deferral	-	-	-
Major capital project deferral	(38 003)	(28 720)	-
	<u>113 759</u>	<u>191 806</u>	<u>169 910</u>
Amortization of regulatory deferral accounts			
DSM programs	(42 544)	(42 483)	(45 583)
Site remediation	(4 707)	(4 930)	(5 645)
Regulatory costs	(5 303)	(2 083)	(1 736)
Acquisition costs	(692)	(692)	(692)
Change in depreciation method	-	-	-
Deferred ineligible overhead	(3 862)	(4 455)	(5 050)
Loss on retirement or disposal of assets	-	-	-
Affordable Energy Fund	(87)	-	-
Conawapa	(12 627)	(12 627)	(12 627)
Keeyask in-service deferral	-	-	(1 014)
DSM deferral debit balance	-	-	-
DSM deferral credit balance	-	-	-
Bipole III deferral	77 398	77 398	77 398
Major capital project deferral	-	12 405	49 619
	<u>7 576</u>	<u>22 533</u>	<u>54 670</u>
Closing balance of net regulatory deferral			
DSM programs	257 307	273 142	286 688
Site remediation	43 426	54 704	64 259
Regulatory costs	2 246	2 484	4 845
Acquisition costs	7 020	6 328	5 636
Change in depreciation method	240 120	287 508	342 229
Deferred ineligible overhead	129 517	145 262	160 412
Loss on retirement or disposal of assets	71 388	73 888	76 388
Affordable Energy Fund	3 781	3 781	3 781
Conawapa	341 323	328 696	316 068
Keeyask in-service deferral	15 935	89 526	102 575
DSM deferral debit balance	48 800	48 800	48 800
DSM deferral credit balance	(48 800)	(48 800)	(48 800)
Bipole III deferral	(174 771)	(97 373)	(19 974)
Major capital project deferral	(70 518)	(86 833)	(37 214)
	<u>866 774</u>	<u>1 081 113</u>	<u>1 305 693</u>



**2021/22 Interim Rate Application
PUB/MH I-6**

REFERENCE:

Application p.38; MFR 7 – Keeyask In-Service Deferral

PREAMBLE TO IR (IF ANY):

At Application page 38, Manitoba Hydro states: “Under International Financial Reporting Standards (IFRS) assets are to be placed in-service when they are recognized as being used and useful. This accounting standard results in a significant increase in the assets placed in-service with the first turbine unit (i.e. powerhouse, dams, spillway and water control) and a decrease in the assets placed in-service with the subsequent 6 turbine units (i.e. unit specific assets) compared to Manitoba Hydro’s past accounting practice. At each in-service, depreciation and finance expense on the related assets are recognized into net income. In order to provide a consistent approach in the timing of the recognition of depreciation and finance expense costs that are included in revenue requirement, Manitoba Hydro established the Keeyask In-Service Regulatory Deferral to capture the annual differences in depreciation and finance expense between the two methods. When the 7th and final turbine unit is in-service, there will no longer be a difference in the depreciation and finance expense between Manitoba Hydro’s previous accounting practice and IFRS, and the balance in the Keeyask In-Service Deferral will commence amortization over the average service life (95 years) of the installed assets.”

QUESTION:

Please provide the details of the composition (finance expense, depreciation, etc.) of the proposed deferral of Keeyask in-service costs of \$15.935 million in 2020/21, \$73.591 million in 2021/22, and \$14.063 million in 2022/23. Provide Manitoba Hydro’s pros/cons/recommendations for offsetting the full [\$103.62 million] amount of this new Keeyask In-Service Deferral Account in fiscal 2021/22 with the full [~\$100 million] amount in the Major Capital Project deferral account.



**2021/22 Interim Rate Application
 PUB/MH I-6**

RESPONSE:

Please see table below for the composition (finance expense and depreciation) of the Keeyask In-service deferral of \$15.935 million in 2020/21, \$73.591 million in 2021/22, and \$14.063 million in 2022/23.

KEYYASK IN-SERVICE DEFERRAL	<i>(in millions of dollars)</i>			
	2020/21	2021/22	2022/23	2023/24
Depreciation	2.930	12.190	3.155	-
Finance Expense	13.006	61.401	10.908	-
	15.935	73.591	14.063	-

The Major Capital Project Deferral represents amounts previously collected from customers from the 2.5% rate increase approved by the PUB effective June 1, 2019 set aside to help mitigate the depreciation and finance expenses when Keeyask Generating Station and other major capital projects come into service. If this deferral is offset against the Keeyask In-service Deferral, there is no mitigation against these costs to avoid a material negative net income impact at the time the assets enter service. Our approach is consistent with page 3 of PUB Order 69/19, that “the deferral account will partially mitigate future rate increases required when new major capital projects are in-service, consistent with the principles of rate stability and predictability. This increase will contribute additional revenues to Manitoba Hydro in 2019/20 and in future years”.

The Keeyask In-service Deferral was established based on Manitoba Hydro’s past practice of recognizing expenses associated with the generating station on a per-unit basis for rate-setting purposes. The intent of deferring these expenses was to recognize them over the expected life of the assets. If this deferral is offset with the Major Capital Project Deferral these costs would be fully expensed in 2022/23 whereas the underlying assets have an expected useful life of 95 years. Without this deferral, the depreciation and finance expense of \$73.6 million would have been included in revenue requirement in 2021/22 with \$14.1 million included the following year.



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The 2021/22 Interim Rate Application proposes full amortization of the Major Capital Project Deferral by 2023/24 and \$1 million of annual amortization of the Keeyask In-service Deferral beginning in 2022/23 as outlined in the table below. The table compares the net income impacts between the assumptions included in Manitoba Hydro's 2021/22 Interim Rate Application and a scenario that assumes the Keeyask In-service Deferral and the Major Capital Project Deferral are fully amortized in the 2022/23 fiscal year. By offsetting the amortization of the two regulatory deferral accounts in 2022/23, net income will decrease by \$12 million in 2021/22, \$53 million in 2022/23, and \$36 million in 2023/24 and result in a cumulative reduction to retained earnings of \$101 million by March 31, 2024. All additions and amortizations in Net Movement are non-cash entries and do not increase/decrease Manitoba Hydro's cash available to fund core business operations.

Manitoba Hydro is of the opinion that there are no advantages to offset the Keeyask In-service Deferral account with the Major Capital Project Deferral account. Given the impacts identified above Manitoba Hydro does not recommend offsetting the full (\$104.589 million) in Keeyask In-service Deferral account with the full (\$~100 million) amount in the Major Capital Project Deferral account.



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	<i>(in millions of dollars)</i>			
	2020/21	2021/22	2022/23	2023/24
2021/22 INTERIM RATE APPLICATION				
Additions to Net Movement				
Keyyask In-Service Deferral	16	74	14	-
Major Capital Project Deferral	(38)	(29)	-	-
Amortization in Net Movement				
Keyyask In-Service Deferral	-	-	(1)	(1)
Major Capital Project Deferral	-	12	50	37
Net Increase/(Decrease) to Net Income	(22)	57	63	36

	<i>(in millions of dollars)</i>			
	2020/21	2021/22	2022/23	2023/24
SCENARIO: FULLY AMORTIZE KEYYASK IN-SERVICE DEFERRAL AND MAJOR CAPITAL PROJECT DEFERRAL IN 2022/23				
Additions to Net Movement				
Keyyask In-Service Deferral	16	74	14	-
Major Capital Project Deferral	(38)	(29)	-	-
Amortization in Net Movement				
Keyyask In-Service Deferral	-	-	(104)	-
Major Capital Project Deferral	-	-	99	-
Net Increase/(Decrease) to Net Income	(22)	45	10	-

Differential Impacts to Net Income	-	(12)	(53)	(36)
Cumulative Impacts	-	(12)	(65)	(101)

Manitoba Hydro's 2021/22 Interim Rate Application
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PUB MFR 10

Financial Results and Forecasts

Continuity schedules showing the deferrals and amortization (or proposed amortization) of the Bipole III Deferral Account and the Major Capital Deferral Account. [2019/20 GRA PUB/MH I-11]

The following table provides a continuity schedule of the Bipole III deferral account showing amounts deferred by fiscal year and straight line amortization over a 5 year period commencing July 2018 as directed by the PUB in Order 59/18.

Bipole III Deferral

(in Millions of Dollars)

Year	Amount Deferred	Amortization	Ending Balance
2013/14	19		19
2014/15	30		49
2015/16	51		100
2016/17	96		196
2017/18	152		348
2018/19	39	(57)	330
2019/20	-	(77)	252
2020/21	-	(77)	175
2021/22	-	(77)	97
2022/23	-	(77)	20
2023/24	-	(20)	-

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The following table provides a continuity schedule of the Major Capital Project Deferral Account showing amounts deferred by fiscal year and proposed straight line amortization over a 2-year period commencing January 1, 2022.

Major Capital Project Deferral
(in Millions of Dollars)

Year	Amount Deferred	Amortization	Ending Balance
2019/20	33		33
2020/21	38		71
2021/22	29	(12)	87
2022/23	-	(50)	37
2023/24	-	(37)	-

NEWS RELEASE ([HTTPS://WWW.HYDRO.MB.CA/ARTICLES/CATEGORIES/NEWS_RELEASES/](https://www.hydro.mb.ca/articles/categories/news_releases/))

Extreme drought forecast to hit Manitoba Hydro's 2021–22 bottom line

Utility forecasting a loss of between \$190–\$200 million for the current fiscal year

Manitoba Hydro released its [second quarterly report](#) for the first six months of the 2021–22 fiscal year today showing the utility forecasts an approximate \$400 million reduction in net export revenues due to the ongoing drought.

As a result, Manitoba Hydro now anticipates a potential loss of between \$190 million and \$200 million for the current fiscal year. Manitoba Hydro had initially budgeted a positive net income of \$190 million for the 2021–22 fiscal year, as noted in its 2020–21 Annual Report.

Late fall and winter precipitation, as well as the effect of the rate increase Manitoba Hydro receives — once reviewed and approved by the Public Utilities Board (PUB) — have the potential to impact the range of potential loss for the 2021–22 fiscal year. Manitoba Hydro is currently preparing a rate application to file with the PUB Nov. 15, 2021.

The revised forecast continues a trend noted in the Corporation's first quarter report issued in September. The lack of significant precipitation across much of Manitoba Hydro's watershed over the past year and lower water flows — water inflows to the southern portion of the system are the lowest in 40 years — have weakened the utility's ability to generate and sell surplus energy on spot markets in the United States and Canada.

"Drought is one of the major risks for any utility that is predominantly hydroelectric," said Jay Grewal, President and CEO of Manitoba Hydro. "For Manitoba Hydro, anytime we have average to above-average water flows, we take advantage of that by running that water through our turbines and selling that excess energy on the opportunity or spot market, rather than simply spilling it downriver.

That additional revenue is money we use to help keep rates for our customers here in Manitoba lower than they would be otherwise."

The quarterly report said Manitoba Hydro's consolidated net loss (electrical and natural gas operations) was \$90 million for the first six months of 2021–22, compared to a \$41 million loss for the same period last year. The increase in net loss was attributable to higher finance expense and depreciation expense largely due to the first four of seven units of the Keeyask Generating Station being placed into service, as well as decreased spot market sales, offset to a degree by higher firm energy sales tied to Keeyask.

Keeyask is a 695-megawatt (MW) hydroelectric generating station that is being developed in a partnership between Manitoba Hydro and 4 Manitoba First Nations: Tataskweyak Cree Nation, War Lake First Nation, York Factory First Nation, and Fox Lake Cree Nation.

Despite the drought, Manitoba Hydro's customers can rest assured that their energy needs will be met throughout the winter months when heating loads kick in. The utility is managing its system to maintain energy security and reliability to ensure it can continue to meet all domestic and firm export commitments. This includes purchasing energy at night to conserve water and allow for increased generation during periods of peak demand during the day.

For more information, please contact:

Bruce Owen – Media Relations Officer

204-794-8270

bowen@hydro.mb.ca

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 Corporate

COALITION MFR 22

Corporate

Please provide a detailed explanation of how MH plans to revise its strategic actions for 2021/22 and 2022/23 to reduce the deleterious impacts of drought (ie - preserving cash flow, minimizing additional debt, maximizing revenues and minimizing expenses, etc) including:

- a) Potential deferrals or repriorizations of capital expenditures in the event of financial distress due to drought (i.e., regardless of the existing plan, what is the contingency plan to minimize capex to what is critically necessary);
- b) Potential O, M and A and other cost reductions that could be implemented in the event of financial distress (see above); and
- c) Potential adjustments to corporate strategies such as alternate debt management strategies and strategies to maximize domestic and net export revenues before asking for rate increases.

a) Manitoba Hydro's fleet of assets is aging, and sustained capital expenditures are essential to keep the reliability and safety of the system at acceptable levels, as aging infrastructure continues to be a top risk for the corporation. Manitoba Hydro has a rigorous process to prioritize and optimize capital expenditures to sustain our assets based on value (in the areas of Financial, Reliability, Safety, Environment and Corporate Citizenship). Investment is allocated to the areas where there is the greatest risk mitigated or benefit to be gained. Deferring investments will generally erode value by increasing risks associated with the aging assets, increasing costs associated with remediation of those risks, decreasing asset reliability, or some combination of the three. These impacts of deferral will ultimately negatively impact customers through decreased reliability and/or increased costs for Manitoba Hydro that will need to be passed on to customers.

Increasing spend on projects during a drought will be an opportunity in some cases. For example, where there is not enough water flowing to operate a generator and it is sitting idle, work can be done on that unit as there is no 'lost generation cost' of the outage.

b) From 2016/17 through to 2022/23, Manitoba Hydro's electric O&A expenditures have seen a compounded annual growth of 2.37%, which is lower than the 2.75% compounded annual growth for CPI during that same time period.

	2016/17 (Pre-VDP) Actual	2017/18 (VDP Beginning) Actual	2018/19 (VDP Complete) Actual	2019/20 (Pre-Pandemic) Actual	2020/21 (Pandemic/Cost Savings) Actual	2021/22 Forecast	2022/23 Preliminary Plan
(in millions of \$)							
O&A - electric	536	517	508	512	534	557	595

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 Corporate

This relatively low annual growth is a result of Manitoba Hydro making significant O&A cost reductions over the past number of years, despite the fact that there have been increased costs that have been out of Manitoba Hydro’s control.

O&A cost reductions have included: a workforce reduction through the Voluntary Departure Program (“VDP”) in 2017/18; as well as the cost savings initiative in which the provincial government required that Manitoba Hydro contribute to financial and workforce reductions in response to the COVID-19 pandemic in 2020/21 (as outlined in PUB MFR 12).

Uncontrollable O&A expenditures were a result of the unprecedented storm in October 2019 and incremental expenditures due to the pandemic. In addition, with the winding down of major capital projects, O&A costs are going up as there is a shift from resources working on construction activities, focused on large hydro-electric and transmission line development, to operating activities in support of Strategy 2040 and building up the capability to meet the evolving energy landscape.

Full Time Equivalents (“FTEs”) are currently at the lowest levels seen since before the purchase of Winnipeg Hydro in 2002; however, this level of FTEs is not sustainable. Manitoba Hydro currently has an external hiring plan in place to return to pre-pandemic FTE levels which will allow Manitoba Hydro to ensure that it can continue to provide safe and reliable service to its customers.

	2016/17 (Pre-VDP) Actual	2017/18 (VDP Beginning) Actual	2018/19 (VDP Complete) Actual	2019/20 (Pre-Pandemic) Actual	2020/21 (Pandemic/Cost Savings) Actual	2021/22 Forecast	2022/23 Preliminary Plan
Corporate FTE	6,411	5,998	5,475	5,391	4,953	5,022	5,420

- c) Manitoba Hydro’s fundamental debt management objective is to provide stable, low cost funding to meet the financial obligations and liquidity needs of the Corporation, while maintaining risk at prudent levels and reserving sufficient flexibility to adapt to changing circumstances.

Manitoba Hydro has made some slight shifts from the forecast term to maturity of new debt issuance for fiscal 2021/22, issuing debt with a weighted average term to maturity (“WATM”) of 15.4 years at a weighted average interest rate (“WAIR”) of 2.09% year to

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date (versus a WATM of 37.2 years and a WAIR of 2.15% in 2020/21). This strategy has benefited finance expense, as rates across the yield curve have risen above forecasted levels year to date in 2021/22.

There are risks to employing short term cost conservation techniques. With respect to shortening the term to maturity of long term debt issuance, this adds refinancing risk in the debt profile earlier than planned. Given the extended WATM of 37.2 years in the 2020/21 fiscal year, Manitoba Hydro is comfortable with slightly shortening the WATM in 2021/22.

Decreasing the level of pre-funding to reduce the associated cost to carry would provide some short term cost conservation; however, it would also introduce liquidity risk and reduce flexibility for timing of new debt issuances. Manitoba Hydro risks being forced into accepting price and terms from financial markets in a "just-in-time" funding scenario in order to meet cash requirements rather than having the flexibility to choose the timing to align debt issuance with the debt management objective.

Increasing the floating rate debt as a percentage in the debt portfolio, including swapping fixed rate long term debt to floating rate debt may result in cost savings in the short term in a typical upward sloping yield curve; however, this introduces interest rate risk (there would be savings in the front years, however at the time of transaction – either debt issuance or swap - the expectation is to be economically indifferent between fixed and floating rate debt of the same term to maturity). Given the current economic environment where inflation is running high and current forecasts are showing short term rates will be rising in the next fiscal year and beyond, Manitoba Hydro has chosen not to employ the strategy of increasing floating rate debt and risk the related rising finance expense in the near term. Manitoba Hydro is, however, anticipating issuance of a small amount of commercial paper. It should be noted that the increased limit of \$1.5 billion for the commercial paper program has not been approved for use, nor guaranteed as of yet, by the Province of Manitoba.

Please see Section 2.2 of the Application which details the price risk mitigation activities undertaken to date by Manitoba Hydro to maximize net extraprovincial revenues. Manitoba Hydro continues to pursue hedging opportunities as market opportunities present themselves to further reduce price risk.



**2021/22 Interim Rate Application
PUB/MH I-7**

REFERENCE:

Coalition MFR 22

PREAMBLE TO IR (IF ANY):

Manitoba Hydro explains that, in response to the drought, it is not planning to adjust any strategic actions related to capital expenditures, O&A expenditures (above what has already been done in response to prior management direction and the pandemic), and in fact has a plan to increase O&A expenditures and potentially use the opportunity of idled generating units to increase capital expenditures. In response to the drought, Manitoba Hydro has adjusted its approach to debt issues by reducing the weighted average term to maturity in order to achieve a lower weighted average interest rate, and has implemented some price risk mitigation activities.

QUESTION:

Please confirm whether Manitoba Hydro, to mitigate the impact of the drought, has taken only the steps identified in Coalition MFR 22 and summarized in the above Preamble, in addition to applying for a 5% rate increase and taking on additional debt. If not confirmed, please provide details of the additional steps taken.

RESPONSE:

As outlined in Coalition MFR 22, Manitoba Hydro's primary response to mitigate the financial impact of the drought is the price risk mitigation activities undertaken to maximize net extraprovincial revenues (by minimizing fuel and power purchase costs). Manitoba Hydro also confirms that the weighted average term to maturity of new debt issuance year to date (\$1.4 billion) for fiscal 2021/22 has been reduced slightly from the 20-year target. However, the utility notes that given the large volume of debt outstanding, the weighted average term to maturity for the entire debt portfolio remains at 19.4 years at October 31, 2021 with a weighted average interest rate of 3.4% (excluding the provincial guarantee fee).



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As outlined in Section 2.1 of the application, drought is an imposed risk that originates from uncontrollable and unavoidable external factors and it is not possible to accurately predict when drought will occur or how long droughts will continue for. Unlike drought, Manitoba Hydro's capital spending relates to planned projects that need to occur to sustain our aging assets at an acceptable level of performance and risk. Ageing assets is one of the top risks facing Manitoba Hydro and the capital spending associated with Manitoba Hydro's Business Operations capital is key to mitigating that risk. Deferral of capital spending will increase costs and/or increase the risk of asset failures which could impact reliability, compliance, the environment and the safety of the public and our employees.

Additionally, more than 90% of the capital spending relates to in-flight projects/programs (projects/programs where spending has already started), due to the multi-year nature of many projects. These projects cannot be deferred without incurring a significant impact as it is inefficient and costly to defer projects that are in-flight.

In the response to Coalition MFR 22, Manitoba Hydro noted that increasing capital spending during a drought could be an opportunity in some cases, by completing work at a time when there would be no opportunity cost of lost generation, such as when a generator is sitting idle because there is not enough water flowing to operate that generator. To clarify, Manitoba Hydro does not currently have a plan to increase capital spending. This was simply an example identified to highlight the opportunity associated with executing capital project work when lost generation costs would not be incurred (i.e. the potential for greater economic benefit associated with the capital expenditure).

Similarly, Manitoba Hydro's operating and administrative ("O&A") expenditures are not temporary or easily adjusted as they are made up primarily of employee wages, salaries and benefits. As outlined in Coalition MFR 22, Full Time Equivalents ("FTEs") are at their lowest levels since before the purchase of Winnipeg Hydro in 2002, and current staffing levels need to be addressed to ensure that Manitoba Hydro can continue to provide safe and reliable service to its customers and minimize the lifecycle costs of its assets. In addition, Manitoba Hydro's assets have increased to \$30.5 billion in 2021/22, compared to approximately \$17 billion in 2014/15, which will drive ongoing requirements in operating and maintenance costs. Please see the response to PUB/MH I-5 for additional information on increases in FTEs.



**2021/22 Interim Rate Application
PUB/MH I-5**

REFERENCE:

Application Section 4.0; PUB MFR 3

PREAMBLE TO IR (IF ANY):

QUESTION:

- a) Include in the response Manitoba Hydro's Q1 & Q2 O&A Reports that it planned to file with the PUB so it is on the public record.
- b) Provide comparative breakdown of O&A by quarter for BOTH 2020/21 AND 2021/22 at the same level of detail included in the quarterly O&A Reports – recognizing Manitoba Hydro does not have O&A details by cost element, business unit, or by quarter available for 2022/23.
- c) Provide additional narrative as to why Manitoba Hydro has forecast O&A in the 2022/23 Preliminary Plan (shown in PUB MFR #3) increasing to \$595 Million from the \$534 Million Actual in 2020/21 and \$557 Million forecast for 2021/22.

RESPONSE:

- a) Please see the attachment to this response.



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b) Please see the following schedule that provides a comparative breakdown of O&A by quarter for both actual results and budget for 2020/21 as well as budget by quarter for 2021/22 at the same level of detail included in the quarterly O&A reports provided to the Public Utilities Board.

	2020-21 Actual				2020-21 Budget				2021-22 Budget			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<i>thousands of \$</i>				<i>thousands of \$</i>				<i>thousands of \$</i>			
Employee Related Expenditures												
Wages & salaries	\$112 261	\$109 327	\$107 812	\$111 408	\$116 702	\$119 157	\$117 878	\$115 429	\$107 547	\$110 259	\$114 091	\$114 468
Overtime	14 997	15 485	13 641	14 300	18 284	17 476	15 913	16 755	14 956	15 333	15 866	15 919
Employee benefits	38 032	36 428	33 096	68 565	42 121	36 259	32 967	42 718	35 689	36 588	37 860	37 985
Other	14 312	14 633	15 439	14 113	17 770	17 399	17 372	18 007	16 770	17 193	17 790	17 849
Total Employee Related Expenditures	179 602	175 873	169 988	208 386	194 877	190 291	184 130	192 909	174 963	179 373	185 608	186 222
Less: Capitalized labour and overhead	(67 285)	(62 255)	(62 313)	(75 668)	(76 072)	(74 189)	(74 580)	(73 573)	(62 734)	(64 315)	(66 551)	(66 771)
Operational Employee Related Expenditures	112 317	113 618	107 675	132 718	118 805	116 102	109 550	119 336	112 229	115 058	119 058	119 451
External services and materials	30 144	31 675	32 436	38 166	34 427	36 193	34 782	36 552	38 187	39 150	40 510	40 644
Donations, sponsorships & grants	347	155	214	346	550	480	480	481	366	375	388	389
Uncollectible accounts	1 008	2 034	1 515	2 916	1 066	1 066	1 066	1 066	1 755	1 799	1 861	1 867
Other	(40)	138	(20)	584	(1 033)	(1 029)	(1 034)	(1 032)	(257)	(264)	(273)	(274)
Cost recoveries	(1 978)	(2 968)	(3 013)	(4 259)	(3 483)	(3 485)	(3 483)	(3 498)	(3 378)	(3 463)	(3 583)	(3 595)
O&A charged to gas operations	(14 302)	(14 368)	(15 513)	(17 632)	(15 267)	(15 890)	(15 870)	(15 448)	(15 419)	(15 251)	(15 842)	(14 489)
Operating & Administrative Expenses	\$127 496	\$130 284	\$123 294	\$152 839	\$135 065	\$133 437	\$125 491	\$137 457	\$133 482	\$137 404	\$142 119	\$143 994



**2021/22 Interim Rate Application
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c) The increases in the 2022/23 Preliminary Plan from 2020/21 actuals and the 2021/22 Forecast are a result of:

- Higher wages and salaries, due to:
 - the need to increase Full Time Equivalent (‘‘FTE’’) – additional narrative is outlined below; and
 - approved salary increases – in August 2021, the Manitoba Labour Board ordered General Wage Increases (‘‘GWI’’) for IBEW employees retroactive to January 1, 2019 as well as a one-time special payment to a majority of IBEW employees. Additionally, in October 2021, Manitoba Hydro approved a GWI for all Corporate Exempt staff, effective January 1, 2021.
- Increased non-salary costs, including environmental monitoring required at Keeyask upon it being placed in-service, treatment of zebra mussels at generating stations, motor vehicle costs including fuel and travel related to customer work with the return to normal operations. These costs are necessary to operate and maintain the electrical system.
- Increased O&A costs due to a decrease in construction activities. With the winding down of the major capital projects, there is a shift from resources working on construction activities, focused on large hydro-electric and transmission line development, to operating activities. This results in higher O&A costs. Many of the staff involved in the major capital projects were terminated following completion; however, for those staff remaining with Manitoba Hydro, there has been a shift to operating and maintenance activities. During Manitoba Hydro’s peak construction period (2016/17 and 2017/18) Manitoba Hydro’s workforce was deployed 43% to construction activities. As these major projects are completed, the level of deployment to capital construction work was 37% in 2020/21 and is expected to decrease to 33% in the 2022/23 Preliminary Plan.

Increase to FTEs

From 2016/17 through to 2020/21, Manitoba Hydro saw a decrease in FTEs of almost 23%. A large component of this decrease was a result of the Voluntary Departure Program (VDP) which started in 2017. The VDP resulted in a 15% decrease in FTEs, which Manitoba Hydro is committed to maintain.



**2021/22 Interim Rate Application
PUB/MH I-5**

Further, in 2020/21, Manitoba Hydro was required to contribute to the government cost savings initiative in response to the pandemic. This resulted in O&A cost savings in 2020/21 of approximately \$54 million which was achieved through workforce reductions (approximately \$19 million - net of capitalization) and non-salary operating reductions (approximately \$35 million).

The cost savings associated with the workforce reduction was achieved through a freeze on external hiring and stringent vacancy management, the suspension of the summer student program, as well as a requirement for almost all employees to take three days of unpaid leave. These actions were put in place to avoid cost reductions through the implementation of wide-spread staff layoffs.

The freeze on external hiring also delayed regular recruitment into the trades and technical trainee programs. As it takes multiple years for trainees to become fully trained, regular recruitment is necessary to ensure that a qualified pool of candidates is available to fill vacant trade and technical positions that support Manitoba Hydro's critical electrical and gas operations and maintenance requirements.

In calendar year 2020, Manitoba Hydro also saw an increased number of retirements that far exceeded the levels typically seen (with the exception of the VDP). While retirement take-up among Manitoba Hydro employees is normally quite stable from year to year, at an average rate of approximately 20% of eligible employees, in 2020 there was a take-up of 30%. This was in part due to changes in legislation that would have impacted Manitoba Hydro pension values, as well as the impacts of the global pandemic.

As a result, FTEs in 2020/21 were at their lowest levels since before the purchase of Winnipeg Hydro in 2002.

The level of staffing post-VDP is the minimum staffing levels that will allow Manitoba Hydro to continue to provide safe and reliable service to its customers and minimize the lifecycle costs of its assets. As Manitoba Hydro's assets are ageing, without proper maintenance and investment, there is greater risk which could impact



**2021/22 Interim Rate Application
PUB/MH I-5**

reliability, compliance, the environment and the safety of the public and our employees.

In 2021, Manitoba Hydro developed an external hiring plan to address the low level of FTEs. Manitoba Hydro is currently preparing detailed O&A budgets for 2022/23 and will have additional information to provide at a future General Rate Application. It should be noted that while the 2022/23 Preliminary Plan reflects 5420 FTEs, only 5175 FTEs have been budgeted. As planning continues, the remaining FTEs will be incorporated in future budget years.

December 3, 2021

Exhibit _____

Payments to Governments						
(\$C Millions)	Manitoba Hydro (2020/21¹)	British Columbia Hydro (2020/21²)	Hydro-Quebec (2020³)	Newfoundland Labrador Hydro (2020⁴)	SaskPower (2020/21⁵)	New Brunswick Power (2020/21⁶)
Water Rentals	128	295	716	-	25 ⁷	-
Debt Guarantee Fee	222	-	217	9	-	32
Capital & Other Taxes	167	254	422	-	50	49
Other	-	-	-	-	29	-
Payments to Gov't	517	549	1,355	9	104	81
Gross Operations Revenue	2,353	6,414	13,594	702	2,771	1,834
Payments to Gov't as Percentage of Gross Revenue	22.0%	8.6%	10.0%	1.3%	3.8%	4.4%
Dividends	-	-	1,727	-	-	-
Total Payments to Gov't (with dividend)	517	549	3,082	9	104	81
Total Payments to Gov't (with dividend) as Percentage of Gross Revenue	22.0%	8.6%	22.7%	1.3%	3.8%	4.4%

¹ MFR5 Manitoba Hydro 70th Annual Report (pgs. 38, 76, 78, 111)

² BC Hydro 2020/21 Annual Service Plan Report (pgs. 52, 73)

³ Hydro Quebec 2020 Annual Report (pgs. 66, 68, 78)

⁴ Newfoundland and Labrador Hydro 2020 Annual Report (Pdf pg.49, pg. 21)

⁵ SaskPower 2020/21 Annual Report (pgs. 60, 79)

⁶ New Brunswick Power Corporation 2020/21 Annual Report (pgs. 60, 101)

⁷ SaskPower 2020/21 Annual Report pg. 32 (Hydraulic Generation 24,634 GWh @ 17% hydraulic = 4,187.78 GWh @ \$5.91535/MWh = \$24.772 million The Water Power Rental Regulations, 2018 Chapter W6 Reg 4 (effective April 19, 2018). Available online: <http://www.publications.gov.sk.ca/freelaw/documents/English/Regulations/Regulations/W6R4.pdf>



**2021/22 Interim Rate Application
COALITION/MH I-3a**

REFERENCE:

Application, Pages 7 and 8, PUB MFR's 4, 6 and 8 & Coalition MFR 22; Manitoba Hydro 2017/18 & 2018/19 General Rate Application PUB/MH I-3a

PREAMBLE TO IR (IF ANY):

On Page 7 of the Application, Manitoba Hydro states that "Should the proposed interim rate increase be approved it is anticipated to generate \$27 million of incremental revenue in 2021/22 and \$88 million in 2022/23 ...when considering the level of increase to request in this Application, Manitoba Hydro considered the following: The need to limit further deterioration in Manitoba Hydro's financial health. Even with the proposed 5.0% revenue increase Manitoba Hydro is projecting a net loss of \$190 million in 2021/22, along with a deterioration in its debt ratio to 87% in 2021/22 and 88% in 2022/23."

On Page 8 of the Application, Manitoba Hydro states that "Drought has both an operational and financial impact on Manitoba Hydro. Manitoba Hydro plans and operates its system knowing that droughts will occur at some time in the future."

In PUB MFR 4, the MHEB Quarterly Report for the three months ended June 30, 2021, Manitoba Hydro states "Manitoba Hydro is currently projecting breakeven net income for the 2021-22 fiscal year compared to the budgeted net income of \$190 million. The significant decrease in net income is primarily driven by lower experienced and projected revenues due to reduced volumes available for sale in the export market as a result of unfavorable water conditions."

In PUB MFR 8, Manitoba Hydro states that "...it is important to recognize that retained earnings are not a cash reserve, as demonstrated by incremental borrowings in the current year."

In Coalition MFR 22, Manitoba Hydro states that "Manitoba Hydro is, however, anticipating issuance of a small amount of commercial paper. It should be noted that the increased limit of \$1.5 billion for the commercial paper program has not been approved for use, nor guaranteed as of yet, by the Province of Manitoba."



**2021/22 Interim Rate Application
COALITION/MH I-3a**

In PUB MFR 6, Manitoba Hydro provides calculations of the Debt Ratio, EBITDA Interest Coverage Ratio and Capital Coverage Ratio for 2021/22 and 2022/23, including the impacts of the proposed 5.0% rate increase.

QUESTION:

- a) In terms of managing liquidity risk, please explain if Manitoba Hydro has or is anticipating any problems in accessing debt through long-term advances from the Province of Manitoba in 2022/23. If so, please provide specific evidence to that effect including whether and how this is affecting Manitoba Hydro's financial situation. Please also explain Manitoba Hydro's plans in terms of maintaining cash reserves and making sinking fund withdrawals for 2022/23.

RESPONSE:

Manitoba Hydro has experienced problems in accessing debt through long-term advances from the Province in the past, though it is difficult to anticipate the events that precipitate dislocations in the financial markets. Market liquidity risk for Manitoba Hydro is the risk that the utility will not be able to access sufficient cash via the Province of Manitoba's debt financing from the financial markets in order to meet its obligations. At the beginning of the pandemic in March 2020, financial markets experienced a period of severe dislocation. Unlike during the financial crisis of 2008, the short term markets also experienced dislocation and Manitoba Hydro could not issue commercial paper. Further, no provincial public syndicated deals were transacted for a period of a month and a half following this disruption.

Manitoba Hydro is legislated under *The Manitoba Hydro Act* to make sinking fund contributions to the Province of Manitoba annually. Sinking fund balances are a restricted source of liquidity as the balances can only be withdrawn for debt maturities.

Throughout the capital expansion, the Corporation's investing activities have exceeded the cash flow from operations required by the Corporation. Given that the cash flow requirements are being met through borrowing, Manitoba Hydro has not maintained a



**2021/22 Interim Rate Application
COALITION/MH I-3a**

balance in the sinking fund since 2016 and has no plans or capacity to do so in 2021/22 or 2022/23.



2021/22 Interim Rate Application

1 proposed general revenue increase of 5% in 2021/22, which is expected to generate \$88
 2 million in revenues in 2022/23, Manitoba Hydro would again expect to borrow to fund
 3 core business operations next fiscal year. Manitoba Hydro notes that \$51 million in
 4 surplus cash flow is small considering the size of Manitoba Hydro's operations and the
 5 uncertainties facing the corporation, including the risk of low water.

6
 7 Manitoba Hydro continues to possess the highest debt ratio amongst other Crown-owned
 8 Canadian electricity utilities as illustrated in Figure 12 below.

9
 10 Figure 12: Debt Ratio Amongst Crown-owned Canadian Utilities

	Manitoba Hydro	BC Hydro	SaskPower	Quebec Hydro	Nalcor
Fiscal year ending	Mar 31/21	Mar 31/21	Mar 31/21	Dec 31/20	Dec 31/20
Debt Ratio	86%	80%	71%	69%	63%
Percentage points lower/better than Manitoba Hydro	N/A	-6%	-15%	-17%	-23%

11
 12 A higher debt ratio means a larger proportion of the utility's assets are funded with debt
 13 versus equity and typically a higher proportion of revenues are used to service the cost of
 14 carrying the debt. Figure 13 below compares each utility's interest paid as a percentage
 15 of its total revenues.

16
 17 Figure 13: Interest Paid as a Percentage of Total Revenues Amongst Crown-owned

	Manitoba Hydro	BC Hydro	SaskPower	Quebec Hydro	Nalcor
Fiscal year ending	Mar 31/21	Mar 31/21	Mar 31/21	Dec 31/20	Dec 31/20
Interest Paid as a % of Total Revenue	41%*	14%	16%	28%	42%**
* Manitoba Hydro's total revenues are adjusted for the cost of gas that is a pure pass through and is not available for debt service. ** Nalcor has received equity injections from the Province of Newfoundland. Despite the high equity component in their capital structure, Nalcor has very weak financial metrics and poses a great risk to the Province of Newfoundland which is recognized by credit rating agencies.					

18
 19 **Over 40% of Manitoba Hydro's revenues are used to pay interest on borrowings**
 20 compared to only 14%, 16% and 28% for BC Hydro, SaskPower and Quebec Hydro
 21 respectively. **Having such a high ratio of gross interest to total revenues limits**
 22 **Manitoba Hydro's financial flexibility through its ability to absorb higher operating**

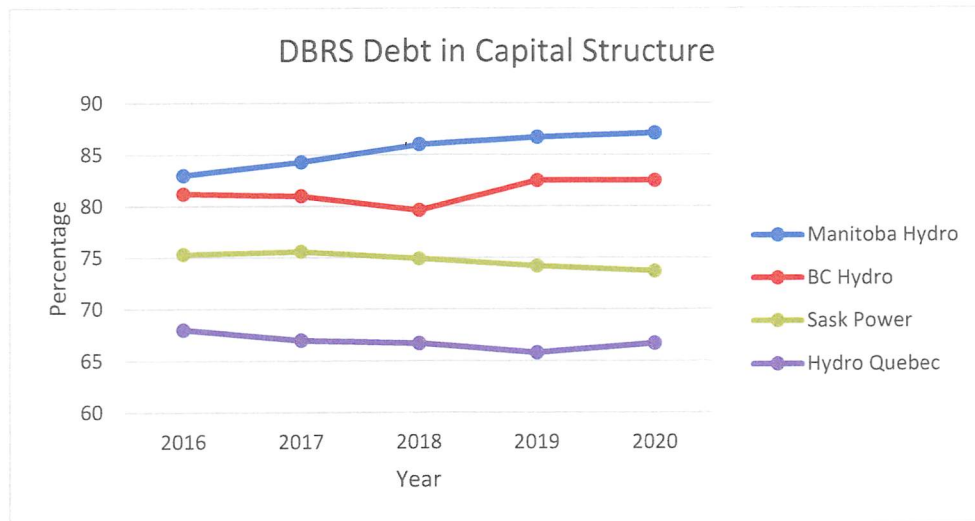


2021/22 Interim Rate Application

1 *debt could also put downward pressure on the Province's credit profile.* – DBRS
2 Report on Manitoba Hydro, December 9, 2020 (PUB MFR 14 – Attachment 4)

3
4 The trend for Manitoba Hydro's debt in capital structure, as compared to its peers (as
5 calculated by DBRS⁶) is shown in Figure 16 below.

6
7 Figure 16: Utility Comparison DBRS Debt in Capital Structure Ratio



8
9 The credit rating agencies viewed the financial targets within Bill 35 as being
10 favourable for Manitoba Hydro's financial health with DBRS indicating:

11 *the PUB would have to take into consideration debt-to-capitalization targets*
12 *in Bill 35 as part of its rate-setting process. DBRS Morningstar believes this*
13 *change is ultimately positive for Manitoba Hydro's financial health as its key*
14 *financial ratios have been weak during this period of elevated capex for the*
15 *Keeyask Infrastructure and Generating Station Project (the Keeyask Project;*
16 *total capex of \$8.7 billion). Leverage for the Utility has increased to more than*

⁶ All financial data for peer utilities taken from DBRS reports on peers:

- *British Columbia Hydro and Power Authority May 27, 2020 p. 2 please note, information for 2020 includes actual results for the 12 months to December 31, 2019. Fiscal year is March 31.*
- *Hydro Quebec December 9, 2020 p. 2 please note, information for 2020 includes actual results for the 12 months to September 30, 2020. Fiscal year is December 31.*
- *Sask Power December 30, 2019 p. 1 please note, information for 2020 includes actual results for the 12 months to June 30, 2019. Fiscal year is March 31.*