

**2017/18 & 2018/19 ELECTRIC GENERAL RATE APPLICATION****Manitoba Hydro Undertaking #6**

**Manitoba Hydro to provide updates to PUB-MFR-55 and MIPUG-Manitoba Hydro First Round 14B.**

**Response:****Update to PUB MFR 55:**

Please see Coalition/MH I-96d for PUB MFR 55 based on MH16 Update with Interim.

The following table for PUB MFR 55 is based on MH16 Update with Interim with 20 Year WATM at MH15 Rates.

**MANITOBA HYDRO**

**Summary of Total Finance Expense**

Forecast as per MH16 Update with Interim - 20 Year WATM at MH15 Rates  
(in \$ millions Canadian Dollars)

	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024
Interest on Short & Long Term Debt													
Gross Interest	490	515	528	569	645	707	768	809	875	943	974	1 002	1 023
Provincial Guarantee Fee	82	90	96	105	118	132	154	186	212	232	244	247	251
Amortization of (Premiums), Discounts, and Transaction Costs	0	0	2	2	2	2	1	1	1	3	3	2	(0)
Intercompany Interest Receivable	(17)	(19)	(19)	(14)	(14)	(14)	(15)	(16)	(16)	(17)	(18)	(19)	(20)
<b>Total Interest on Short &amp; Long Term Debt</b>	<b>555</b>	<b>587</b>	<b>608</b>	<b>663</b>	<b>751</b>	<b>827</b>	<b>909</b>	<b>981</b>	<b>1 072</b>	<b>1 160</b>	<b>1 202</b>	<b>1 231</b>	<b>1 255</b>
<b>Interest Allocated to Construction</b>	<b>(167)</b>	<b>(138)</b>	<b>(140)</b>	<b>(145)</b>	<b>(176)</b>	<b>(247)</b>	<b>(359)</b>	<b>(320)</b>	<b>(318)</b>	<b>(333)</b>	<b>(290)</b>	<b>(55)</b>	<b>(19)</b>
Interest Earned on Sinking Fund	(10)	(10)	(24)	0	(0)	(0)	(1)	(6)	(14)	(15)	(14)	(2)	(2)
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	(0)	2	(19)	(6)	(6)	15	27	28	28	29	29	9	-
Revaluation of Dual Currency Bonds	3	3	2	1	1	1	1	1	1	1	2	2	2
Corporate Allocation	(19)	(19)	(19)	(19)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
Other Amortization	24	27	28	20	31	30	32	32	31	50	48	50	48
<b>Total Finance Expense</b>	<b>385</b>	<b>452</b>	<b>435</b>	<b>515</b>	<b>582</b>	<b>608</b>	<b>590</b>	<b>698</b>	<b>782</b>	<b>874</b>	<b>959</b>	<b>1 216</b>	<b>1 265</b>
	Forecast 2025	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034	Forecast 2035	Forecast 2036	
Interest on Short & Long Term Debt													
Gross Interest	1 036	1 038	1 063	1 083	1 099	1 091	1 078	1 015	1 014	1 011	1 010	983	
Provincial Guarantee Fee	253	253	256	253	254	254	251	249	249	246	244	242	
Amortization of (Premiums), Discounts, and Transaction Costs	1	1	2	2	2	3	3	3	4	4	4	4	
Intercompany Interest Receivable	(21)	(21)	(23)	(23)	(24)	(24)	(25)	(26)	(26)	(27)	(28)	(29)	
<b>Total Interest on Short &amp; Long Term Debt</b>	<b>1 270</b>	<b>1 271</b>	<b>1 298</b>	<b>1 314</b>	<b>1 332</b>	<b>1 323</b>	<b>1 307</b>	<b>1 242</b>	<b>1 240</b>	<b>1 235</b>	<b>1 231</b>	<b>1 199</b>	
<b>Interest Allocated to Construction</b>	<b>(19)</b>	<b>(18)</b>	<b>(20)</b>	<b>(20)</b>	<b>(24)</b>	<b>(22)</b>	<b>(23)</b>	<b>(19)</b>	<b>(18)</b>	<b>(19)</b>	<b>(21)</b>	<b>(24)</b>	
Interest Earned on Sinking Fund	(4)	(4)	(5)	(12)	(23)	(31)	(42)	(18)	(31)	(44)	(58)	(63)	
Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges	-	-	-	-	-	-	-	-	-	-	-	-	
Revaluation of Dual Currency Bonds	2	1	-	-	-	-	-	-	-	-	-	-	
Corporate Allocation	(18)	(18)	(18)	(18)	(18)	(16)	(15)	(15)	(15)	(15)	(15)	(15)	
Other Amortization	46	44	43	42	40	39	38	37	35	34	33	32	
<b>Total Finance Expense</b>	<b>1 277</b>	<b>1 276</b>	<b>1 297</b>	<b>1 305</b>	<b>1 307</b>	<b>1 293</b>	<b>1 265</b>	<b>1 226</b>	<b>1 212</b>	<b>1 192</b>	<b>1 170</b>	<b>1 130</b>	

**Update to MIPUG/MH I-14b:**

- i. The following table reconciles gross interest from Coalition/MH I-96d. Finance Expense to Interest Paid from the Projected Cash Flow Statement for the 20 year financial forecast based on MH16 Update with Interim.

MH16 Update with Interim	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034	Forecast 2035	Forecast 2036
MFR55 - Gross Interest	765	788	838	888	903	908	910	900	875	852	848	846	821	756	699	669	631	583	542
Provincial Guarantee Fee	154	186	212	230	239	238	239	236	232	224	216	213	212	187	177	166	154	148	135
Intercompany Interest Receivable	(15)	(15)	(16)	(17)	(18)	(19)	(20)	(20)	(21)	(22)	(22)	(23)	(23)	(24)	(24)	(25)	(25)	(26)	(27)
Capitalized interest	(360)	(320)	(319)	(333)	(290)	(55)	(19)	(19)	(18)	(20)	(20)	(24)	(22)	(23)	(19)	(18)	(19)	(21)	(24)
Timing Difference	(14)	(4)	(15)	(6)	1	(9)	1	5	4	3	(3)	1	9	11	3	3	-	13	6
Cash Flow Stmt - Interest Paid	531	635	700	762	834	1 063	1 112	1 101	1 072	1 037	1 019	1 014	997	908	837	795	742	696	632

- ii. The second table reconciles gross interest from PUB MFR 55 (as Updated above) to Interest Paid shown on Figure 1.10 of Manitoba Hydro’s Rebuttal Evidence. Finance Expense to Interest Paid from the Projected Cash Flow Statement for the 20 year financial forecast based on MH16 Update with Interim with 20 Year WATM at MH15 Rates.

MH16 Update with Interim - 20 Year WATM at MH15 Rates	Forecast 2018	Forecast 2019	Forecast 2020	Forecast 2021	Forecast 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026	Forecast 2027	Forecast 2028	Forecast 2029	Forecast 2030	Forecast 2031	Forecast 2032	Forecast 2033	Forecast 2034	Forecast 2035	Forecast 2036
MFR55 - Gross Interest	768	809	875	943	974	1 002	1 023	1 036	1 038	1 063	1 083	1 099	1 091	1 078	1 015	1 014	1 011	1 010	983
Provincial Guarantee Fee	154	186	212	232	244	247	251	253	253	256	253	254	254	251	249	249	246	244	242
Intercompany Interest Receivable	(15)	(16)	(16)	(17)	(18)	(19)	(20)	(21)	(21)	(23)	(23)	(24)	(24)	(25)	(26)	(26)	(27)	(28)	(29)
Capitalized interest	(359)	(320)	(318)	(333)	(290)	(55)	(19)	(19)	(18)	(20)	(20)	(24)	(22)	(23)	(19)	(18)	(19)	(21)	(24)
Timing Difference	(16)	(8)	(19)	(11)	(1)	(13)	(3)	(3)	(6)	(2)	(11)	(7)	1	6	(4)	2	-	1	6
Cash Flow Stmt - Interest Paid	532	652	734	814	909	1 161	1 233	1 246	1 274	1 282	1 298	1 300	1 288	1 216	1 220	1 213	1 206	1 178	
Cash Flow Stmt - Interest Received	(5)	(12)	(22)	(26)	(19)	(7)	(6)	(7)	(6)	(8)	(14)	(29)	(39)	(48)	(25)	(41)	(60)	(81)	(79)
<b>Interest Paid per Figure 1.10</b>	<b>528</b>	<b>641</b>	<b>711</b>	<b>789</b>	<b>889</b>	<b>1 155</b>	<b>1 227</b>	<b>1 239</b>	<b>1 241</b>	<b>1 266</b>	<b>1 268</b>	<b>1 270</b>	<b>1 261</b>	<b>1 240</b>	<b>1 192</b>	<b>1 178</b>	<b>1 154</b>	<b>1 125</b>	<b>1 099</b>