

NEEDS FOR AND ALTERNATIVES TO (NFAT)**Manitoba Hydro's response to MIPUG Exhibit 21**

Question 1 - In respect to the March 11 undertaking #34 to Board Counsel, please also show the calculations to reconcile these amounts to 2012 and 2014 base costs and in-service costs at each LOW, REF, and HIGH levels.

Response:

Please see below tables for response to MIPUG regarding capital cost calculations for Keeyask and Conawapa reconciled to the LOW, REFERENCE and HIGH levels.

**Keeyask - Low, Ref and High
Costs Comparisons (In Billions \$)**

Spent to Date	Low	Ref	High	Low	Ref	High
	NFAT Submission			Current Update, Mar 10/14		
	Mar 31/12			Dec 31/13		
Keeyask 2019/20 ISD						
Generating Station						
Point Estimate	3.05	3.05	3.05	3.36	3.36	3.36
Contingency	0.30	0.53	0.53	-0.18	0.31	0.88
Management Reserve						
Labour Reserve	0.00	0.00	0.38	0.18	0.19	0.19
Escalation Reserve	0.05	0.10	0.15	0.04	0.09	0.14
Total Base Dollars (Excluding Spent to Date)¹	3.4	3.7	4.1	3.4	3.9	4.6
Spent to Date (without interest) ²	0.34	0.34	0.34	0.62	0.62	0.62
Base Estimate (Excluding Spent to Date)	3.40	3.68	4.11	3.39	3.94	4.56
Escalation @ CPI	0.34	0.37	0.42	0.24	0.29	0.34
Capitalized Interest (incl. interest paid on Spent to Date)	0.91	0.94	1.01	1.02	1.09	1.15
G.S. In-Service Cost	5.0	5.3	5.9	5.3	5.9	6.7
Interest on MH Equity	0.2	0.2	0.2	0.2	0.2	0.2
Generation Outlet Transmission (GOT)						
Spent to date	0.00	0.00	0.00	0.00	0.00	0.00
Base Estimate	0.12	0.16	0.21	0.12	0.16	0.21
Escalation @ CPI	0.01	0.02	0.02	0.01	0.01	0.02
Capitalized Interest	0.02	0.03	0.04	0.02	0.03	0.03
GOT In-Service Cost	0.2	0.2	0.3	0.2	0.2	0.3
Total In-Service Cost³	5.3	5.7	6.3	5.6	6.3	7.2

¹ Low, Ref and High NFAT submission - Base \$ are in 2012\$. Current update Base Dollars are in 2013\$

² Interest paid on Spent to date is included in Capitalized Interest. Spent to date including interest (Mar. 31/12=\$0.50B and Dec 31/13=\$0.85B).

³ Values are based on reference economic indicator as provided in Appendix 11.2 of the NFAT submission.

**Conawapa - Low, Ref and High
Costs Comparisons (In Billions \$)**

	Low	Ref	High	Low	Ref	High
	NFAT Submission			Current Update, Mar 10/14		
	2025/26 ISD			2026/27 ISD		
	Spent to Date			Dec 31/13		
	Mar 31/12					
Generating Station						
Point Estimate	4.53	4.53	4.53	4.93	4.93	4.93
Contingency	0.38	0.75	0.75	-0.47	0.46	1.56
Management Reserve						
Labour Reserve	0.00	0.00	0.51	0.35	0.36	0.38
Escalation Reserve	0.14	0.31	0.44	0.13	0.31	0.51
Total Base Dollars (Excluding Spent to Date)¹	5.0	5.6	6.2	4.9	6.1	7.4
Spent to Date (without interest) ²	0.18	0.18	0.18	0.21	0.21	0.21
Base Estimate (Excluding Spent to Date)	5.05	5.58	6.23	4.94	6.06	7.38
Escalation @ CPI	1.02	1.14	1.27	0.92	1.16	1.43
Capitalized Interest (incl. interest paid on Spent to Date)	2.27	2.45	2.67	2.56	2.97	3.45
G.S. In-Service Cost	8.5	9.3	10.3	8.6	10.4	12.5
Interest on MH Equity	n/a	n/a	n/a	n/a	n/a	n/a
Generation Outlet Transmission (GOT)						
Spent to date	0.00	0.00	0.00	0.00	0.00	0.00
Base Estimate	0.01	0.01	0.02	0.01	0.01	0.02
Escalation @ CPI	0.00	0.00	0.00	0.00	0.00	0.00
Capitalized Interest	0.00	0.00	0.00	0.00	0.00	0.00
GOT In-Service Cost	0.0	0.0	0.0	0.0	0.0	0.0
Total In-Service Cost³	8.5	9.4	10.4	8.6	10.4	12.5

¹ Low, Ref and High NFAT submission - Base \$ are in 2012\$. Current update Base Dollars are in 2013\$

² Interest paid on Spent to date is included in Capitalized Interest. Spent to date including interest paid (Mar. 31/12 = \$0.23B and Dec 31/13 = \$0.29B.)

³ Low, Ref and High NFAT submission In-Service cost based on 2025/26 ISD. Current Update In-Service Cost is based on 2026/27 ISD.

³ Values are based on reference economic indicator as provided in Appendix 11.2 of the NFAT submission.