

Undertaking # Not Numbered (Transcript pages 6469 - 6470)

Refile the graph on net unit costs of Hydro's domestic system (Figure 5-1 from Exhibit MIPUG-13, page 5-3 and updated in response to PUB/MIPUG-1), with adjusted load forecast (denominator calculation) approximately 14% lower, as a result of removing station service and line losses removed for all points.

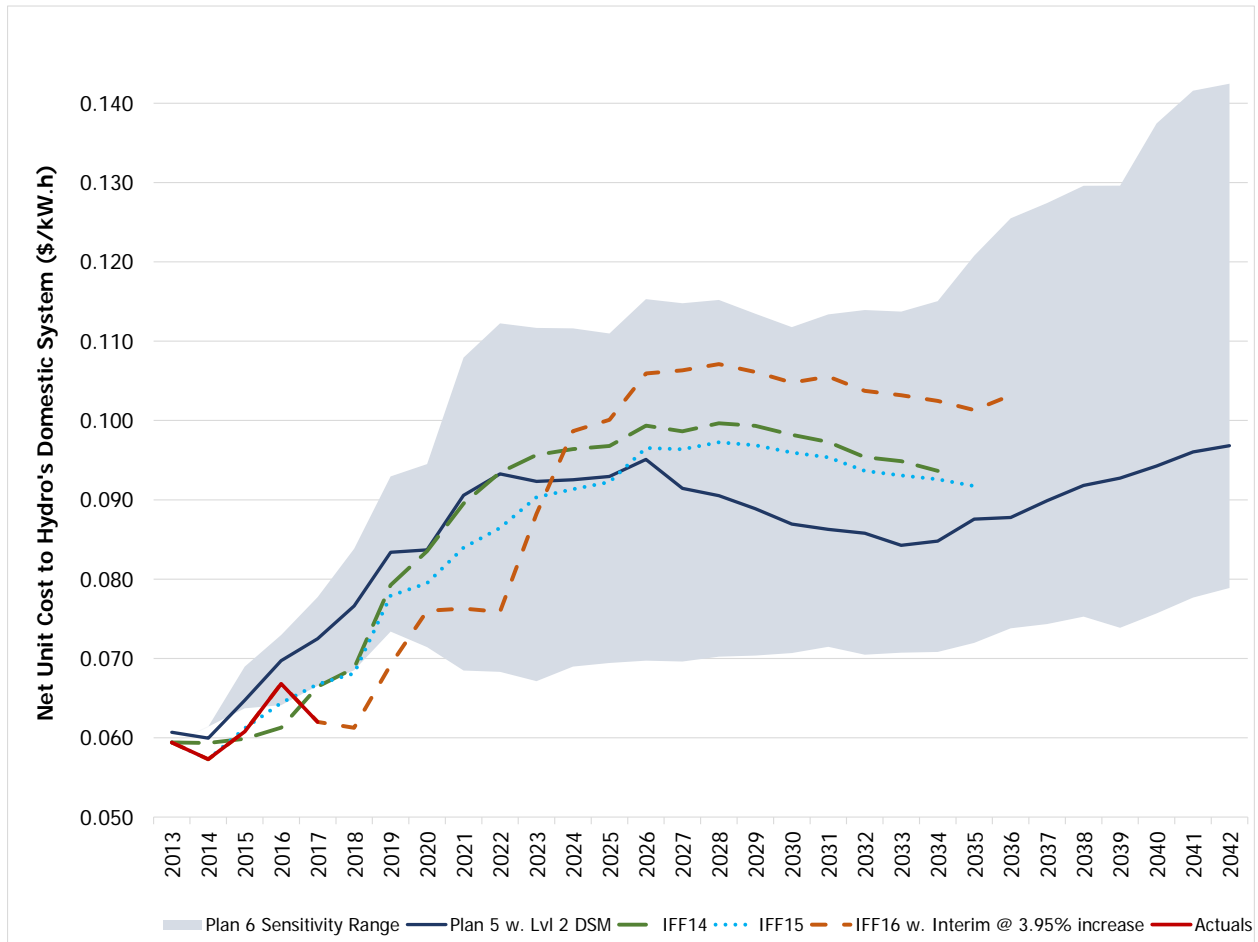
"Well, Mr. Ghikas put to me -- this is the exhibit that is unit costs. And Mr. Ghikas put to me that if you took 14 percent out of the denominator would the size or the numbering of the lines change.

And I suggested that -- although it changes the axis. But if it's helpful to do the math to show that, I'm - I'm prepared to do that."

Response:

Please see the Updated Figure 5-1 and corresponding Updated Table 5-1 below using general consumer sales (i.e. net of station service and line losses) as the denominator to calculate net unit cost to Hydro's domestic system (in \$/kWh). Note that, as described by Mr. Bowman, taking an approximately equal percentage out of the denominator of each scenario leads to the identical image as shown in PUB/MIPUG-1, with the vertical axis scaled (i.e., values start at 6 cents/kWh rather than just over 5 cents in PUB/MIPUG-1, but from there forward the lines track the identical path as PUB/MIPUG-1).

Updated Figure 5-1: Net Unit Cost of Hydro's Domestic System (before reserves) Under NFAT Plan 5/6 versus IFF16 (assuming 3.95% increase scenario) – with General Consumer Sales¹



¹ General Consumer Sales per page 7 of PUB-MFR-65 for 2017 Load Forecast, and page 7 of 2013 Load Forecast (Appendix D from NFAT Review); Original Plan 6 shading – 2012 Load Forecast, page 7 in Attachment C from NFAT; IFF14 – 2014 Load Forecast page 7 of Appendix 7.1 from 2015/16 GRA; IFF15 – page 7 in Attachment 25 in 2015/16 Interim Rate Proceeding. DSM Impacts at Meter and Net Costs from same sources and calculated consistent with Figure 5-1 in MIPUG-13.

Updated Table 5-1: Net Unit Cost of Hydro's System (before reserves) Calculation for NFAT Plan 5 versus IFF16 (assuming 3.95% increase scenario) – with General Consumer Sales

\$ Millions and GW.h	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
NFAT Plan 5 Level 2 DSM (Ex.MH-104-12-3 Update)																								
Operating and Administrative	455	471	516	532	543	567	580	597	659	671	685	697	711	724	738	752	768	780	793	815	832	852	870	887
Finance Expense	454	462	511	542	613	694	815	841	1,132	1,247	1,249	1,266	1,268	1,265	1,230	1,210	1,172	1,136	1,150	1,110	1,072	1,070	1,107	1,124
Depreciation and Amortization	408	439	433	463	476	505	543	553	631	675	682	683	687	696	701	695	693	694	717	729	712	707	729	730
Water Rentals and Assessments	117	125	122	111	111	112	111	113	124	127	127	127	127	127	128	128	128	129	132	131	131	131	131	132
Fuel and Power Purchased	143	144	142	177	193	203	212	213	217	232	240	249	266	259	273	275	287	295	284	313	325	344	360	350
Capital and Other Taxes	87	95	103	113	122	132	138	143	146	146	147	149	150	151	153	155	158	161	169	170	172	174	176	178
Corporate Allocation	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7
Total Expenses	1,673	1,747	1,835	1,945	2,067	2,221	2,408	2,469	2,916	3,107	3,138	3,180	3,217	3,230	3,232	3,223	3,213	3,203	3,251	3,274	3,251	3,283	3,379	3,407
less: Export and other rev	371	423	398	388	446	507	538	587	869	981	1,010	1,023	1,023	958	1,019	1,006	1,010	1,016	1,050	1,055	1,041	1,029	1,019	1,010
Net costs to ratepayers	1,302	1,323	1,437	1,558	1,621	1,714	1,870	1,882	2,047	2,125	2,128	2,157	2,194	2,273	2,213	2,217	2,203	2,187	2,201	2,219	2,210	2,254	2,359	2,397
General Consumer Sales (net of DSM)	21,445	22,076	22,206	22,338	22,361	22,376	22,421	22,483	22,601	22,789	23,049	23,313	23,605	23,902	24,202	24,491	24,792	25,155	25,516	25,870	26,224	26,582	26,945	27,313
Average net cost to ratepayers (before reserves)	0.0607	0.0599	0.0647	0.0697	0.0725	0.0766	0.0834	0.0837	0.0906	0.0933	0.0923	0.0925	0.0929	0.0951	0.0914	0.0905	0.0889	0.0869	0.0863	0.0858	0.0843	0.0848	0.0876	0.0878
MH16 Update with Interim (PUB/MH I-34 Attachment 2)																								
Operating and Administrative					536	518	501	511	513	524	536	548	559	571	583	595	607	620	633	646	660	674	688	702
Finance Expense					608	587	677	749	829	905	1,156	1,202	1,204	1,201	1,214	1,219	1,206	1,194	1,215	1,200	1,197	1,183	1,155	1,128
Finance Income					(17)	(17)	(21)	(28)	(35)	(33)	(37)	(15)	(12)	(14)	(16)	(17)	(16)	(16)	(15)	(17)	(17)	(21)	(22)	(23)
Depreciation and Amortization					375	396	471	515	555	597	689	714	726	739	752	765	776	790	805	822	840	857	872	888
Water Rentals and Assessments					131	130	120	110	113	117	127	128	131	131	131	132	132	132	133	133	133	134	134	134
Fuel and Power Purchased					132	124	140	158	165	156	140	135	138	127	129	131	134	138	147	129	128	134	143	133
Capital and Other Taxes					119	132	145	154	161	165	174	174	175	175	175	176	177	178	179	180	181	182	183	189
Other Expenses					60	116	109	481	94	92	71	64	67	71	76	79	84	87	87	89	91	92	95	96
Corporate Allocation					8	8	8	8	8	8	8	8	8	8	8	8	8	5	3	3	3	3	3	3
less: amounts previously paid through BPIII account					-	-	(3)	(79)	(79)	(79)	(79)	(26)	-	-	-	-	-	-	-	-	-	-	-	-
less: regulatory deferral					(66)	(72)	(114)	(464)	(71)	(64)	(43)	48	50	49	45	44	40	35	33	31	28	28	28	30
Total Expenses	1,407	1,439	1,525	1,649	1,886	1,922	2,033	2,115	2,253	2,388	2,742	2,980	3,046	3,058	3,097	3,132	3,148	3,163	3,220	3,216	3,244	3,266	3,279	3,280
less: Export and other rev	131	159	160	202	488	544	500	451	600	726	813	822	840	702	707	698	714	735	747	744	741	736	734	643
Net costs to ratepayers	1,276	1,280	1,365	1,447	1,398	1,378	1,533	1,664	1,653	1,662	1,929	2,158	2,206	2,356	2,390	2,434	2,434	2,428	2,473	2,472	2,503	2,530	2,545	2,637
General Consumer Sales (net of DSM)	21,477	22,338	22,458	21,654	22,549	22,508	22,151	21,904	21,679	21,906	21,876	21,884	22,041	22,241	22,480	22,715	22,939	23,174	23,421	23,830	24,257	24,683	25,119	25,560
Average net cost to ratepayers (before reserves)	0.0594	0.0573	0.0608	0.0668	0.0620	0.0612	0.0692	0.0760	0.0762	0.0759	0.0882	0.0986	0.1001	0.1059	0.1063	0.1072	0.1061	0.1048	0.1056	0.1037	0.1032	0.1025	0.1013	0.1032