

**Manitoba Hydro Undertaking #33**

**Manitoba Hydro to quantify the effects of the energy in storage depletion attributable to the actions of operators of reservoirs not in the control of Manitoba Hydro.**

Similar to Undertaking No. 34, the following table includes potential Energy in Reservoir Storage (EIS) on April 1<sup>st</sup>, the annual maximum, and on October 31<sup>st</sup> for reservoirs that are not controlled by Manitoba Hydro, but from which outflows supply Manitoba Hydro generation.

Fiscal Year	April 1st		Annual Maximum		October 31st	
	EIS* (TWh)	Δ From Average	EIS* (TWh)	Δ From Average	EIS* (TWh)	Δ From Average
1977/78	1.9	-1.0	7.9**	0.2	7.0	0.7
1978/79	2.6	-0.3	8.8	1.1	7.3	1.0
1979/80	3.1	0.3	9.0	1.2	7.3	1.1
1980/81	3.4	0.6	5.0	-2.7	4.8	-1.5
1981/82	1.3	-1.6	5.5	-2.2	3.8	-2.5
1982/83	0.2	-2.6	7.2	-0.5	6.1	-0.2
1983/84	2.4	-0.4	6.7	-1.0	5.8	-0.4
1984/85	2.5	-0.4	7.3	-0.4	5.2	-1.1
1985/86	2.2	-0.7	8.8	1.1	7.8	1.6
1986/87	3.5	0.7	8.5	0.8	7.4	1.1
1987/88	3.4	0.6	5.9	-1.8	4.7	-1.5
1988/89	1.8	-1.1	5.8	-1.9	5.3	-1.0
1989/90	2.7	-0.2	7.3	-0.4	5.2	-1.1
1990/91	1.9	-0.9	7.6	-0.1	4.7	-1.6
1991/92	1.3	-1.6	6.6	-1.2	5.5	-0.8
1992/93	2.5	-0.4	7.6	-0.1	5.9	-0.4
1993/94	2.1	-0.8	6.8	-1.0	5.7	-0.6
1994/95	2.2	-0.6	7.1	-0.6	6.2	0.0
1995/96	3.3	0.4	7.1**	-0.6	6.4	0.1
1996/97	3.9	1.1	9.3	1.6	9.0	2.8
1997/98	4.9	2.0	9.2	1.5	7.7	1.5
1998/99	4.7	1.8	7.3	-0.4	5.5	-0.8
1999/00	2.1	-0.7	8.1	0.4	7.5	1.2
2000/01	3.9	1.0	7.8**	0.1	6.3	0.0
2001/02	3.5	0.7	9.0	1.2	4.9	-1.4
2002/03	2.1	-0.8	7.4	-0.3	4.0	-2.3
2003/04	1.3	-1.6	3.5	-4.2	3.4	-2.9
2004/05	1.4	-1.5	7.4	-0.3	6.5	0.3
2005/06	3.5	0.6	9.8	2.1	7.6	1.4
2006/07	4.5	1.6	8.1	0.4	6.4	0.1

<b>Fiscal Year</b>	<b>April 1st</b>		<b>Annual Maximum</b>		<b>October 31st</b>	
	<b>EIS* (TWh)</b>	<b>Δ From Average</b>	<b>EIS* (TWh)</b>	<b>Δ From Average</b>	<b>EIS* (TWh)</b>	<b>Δ From Average</b>
2007/08	4.3	1.4	9.8	2.0	9.2	2.9
2008/09	4.9	2.0	10.1	2.3	7.4	1.2
2009/10	4.5	1.6	9.0	1.3	7.3	1.0
2010/11	3.5	0.6	9.9	2.2	8.2	2.0
Avg.	2.9		7.7		6.3	

Notes:

\* Energy in Storage numbers assume Limestone generating station is in service.

\*\* Annual maximum occurred outside Apr-01 to Oct-31 period