

Supply and Demand Tables
DSM Analysis
Plan 6 - DSM Level 2

Date: February 2014

System Firm Winter Peak Demand and Capacity Resources (MW) @ generation
NFAT 2013 Update
Keeyask/Gas40/750MW DSM Level 2

Fiscal Year	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Power Resources																		
New Power Resources																		
New Hydro																		
Conawapa																		
Keeyask																		
1	Total New Hydro																	
New Thermal																		
SCGT																		
CCGT																		
2	Total New Thermal																	
New Imports																		
Contracted																		
Proposed																		
3	Total New Imports																	
4	Total New Power Resources 1+2+3																	
Base Supply Power Resources																		
Existing Hydro																		
Existing Thermal																		
Brandon Coal - Unit 5																		
Selkirk Gas																		
Brandon Units 6-7 SCGT																		
Contracted Imports																		
Proposed Imports																		
Pointe du Bois Rebuild																		
Bipole III Reduced Losses																		
5	Total Base Supply Power Resources																	
6	Total Power Resources 4+5																	
Peak Demand																		
2013 Base Load Forecast																		
Less: Level 2 DSM Forecast																		
7	Manitoba Net Load																	
Contracted Exports																		
Proposed Exports																		
8	Total Exports																	
9	Total Peak Demand 7+8																	
10	Reserves																	
11	System Surplus/(Deficit) 6-9-10																	
12	Less: Brandon Unit 5																	
Exportable Surplus 11+12																		

Date: February 2014

System Firm Winter Peak Demand and Capacity Resources (MW) @ generation
NFAT 2013 Update
Keeyask/Gas40/750MW DSM Level 2

Fiscal Year	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43	2043/44	2044/45	2045/46	2046/47	2047/48	2048/49		
Power Resources																				
New Power Resources																				
New Hydro																				
Conawapa																				
Keeyask																				
1	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	630	
Total New Hydro																				
New Thermal																				
SCGT																				
CCGT																				
2										245	245	245	245	490	490	490	735	735		
Total New Thermal																				
New Imports																				
Contracted																				
Proposed																				
3																				
Total New Imports																				
4	630	630	630	630	630	630	630	630	630	875	875	875	875	1 120	1 120	1 120	1 365	1 365		
Base Supply Power Resources																				
Existing Hydro																				
Existing Thermal																				
Brandon Coal - Unit 5																				
Selkirk Gas																				
Brandon Units 6-7 SCGT																				
Contracted Imports																				
Proposed Imports																				
Pointe du Bois Rebuild																				
Bipole III Reduced Losses																				
5	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741	5 741
Total Base Supply Power Resources																				
6	6 371	6 371	6 371	6 371	6 371	6 371	6 371	6 371	6 371	6 616	6 616	6 616	6 616	6 861	6 861	6 861	7 106	7 106		
Total Power Resources																				
Peak Demand																				
2013 Base Load Forecast																				
Less: Level 2 DSM Forecast																				
7	5 185	5 239	5 294	5 348	5 402	5 457	5 514	5 571	5 630	5 690	5 749	5 809	5 882	5 955	6 028	6 100	6 173	6 246		
Manitoba Net Load																				
Contracted Exports																				
Proposed Exports																				
8	275	275	275	275																
Total Exports																				
9	5 460	5 514	5 569	5 623	5 402	5 457	5 514	5 571	5 630	5 690	5 749	5 809	5 882	5 955	6 028	6 100	6 173	6 246		
Total Peak Demand																				
10	622	629	635	642	648	655	662	669	676	683	690	697	706	715	723	732	741	750		
Reserves																				
11	289	228	167	106	321	259	195	131	65	243	177	110	28	191	110	29	192	110		
System Surplus/(Deficit)																				
12																				
Less: Brandon Unit 5																				
Exportable Surplus																				
	289	228	167	106	321	259	195	131	65	243	177	110	28	191	110	29	192	110		

Date: February 2014

System Firm Energy Demand and Dependable Resources (GWh) @ generation
NFAT 2013 Update
Keeyask/Gas40/750MW DSM Level 2

Fiscal Year	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	
Power Resources																			
New Power Resources																			
New Hydro																			
Conawapa																			
Keeyask																			
1	Total New Hydro						493	2 974	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003
New Thermal																			
SCGT																			
CCGT																			
2	Total New Thermal																		
New Imports																			
Contracted																			
Proposed																			
3	Total New Imports							928	1 113	1 113	1 113	1 113	1 113	1 113	1 113	1 113	1 113	1 113	1 113
4	New Wind																		
5	Total New Power Resources	1+2+3+4					493	3 902	4 116	4 116	4 116	4 116	4 116	4 116	4 116	4 116	4 116	4 116	4 116
Base Supply Power Resources																			
Existing Hydro																			
Existing Thermal																			
Brandon Coal - Unit 5																			
Selkirk Gas																			
Brandon Units 6-7 SCGT																			
Contracted Imports																			
Proposed Imports																			
Hydro Adjustment																			
Market Purchases																			
Existing Wind																			
Pointe du Bois Rebuild																			
Bipole III Reduced Losses																			
6	Total Base Supply Power Resources		21 914	21 912	21 911	21 899	21 888	21 880	21 862	21 854	21 846	21 838	21 838	21 828	21 818	21 818	21 808	21 798	21 788
7	Total Power Resources	5+6	30 211	30 242	30 652	30 700	30 879	30 871	31 127	34 412	34 711	34 703	34 693	34 191	34 063	33 668	33 610	33 646	33 330
Manitoba Domestic Load																			
2013 Base Load Forecast																			
Construction Power - Hydro																			
Less: Level 2 DSM Forecast																			
8	Manitoba Net Load		25 239	25 676	26 013	26 322	26 606	27 003	27 398	27 789	28 197	28 605	29 013	29 418	29 822	30 225	30 625	31 041	31 453
Contracted Exports																			
Proposed Exports																			
Less: Adverse Water																			
9	Total Net Exports		3 156	3 156	2 115	2 012	2 012	2 012	2 012	3 048	4 191	4 314	4 314	4 314	2 031	1 887	1 472	1 389	1 389
10	Total Energy Demand	8+9	28 279	28 920	28 153	27 770	27 795	27 837	27 990	29 017	29 826	30 109	30 424	30 728	29 179	29 420	29 310	29 576	29 933
11	System Surplus/(Deficit)	7-10	1 932	1 322	2 499	2 930	3 084	3 034	3 137	5 395	4 885	4 594	4 279	3 965	5 012	4 643	4 358	4 034	3 713
12	Less : Brandon Unit 5		- 811	- 811	- 811	- 811	- 811	- 811	- 592										
13	Adverse Water				- 309	- 370	- 370	- 370	- 370	- 370	- 489	- 513	- 513	- 513	- 85				
	Exportable Surplus	11+12+13	1 121	511	1 379	1 749	1 903	1 853	2 175	5 025	4 396	4 081	3 766	3 452	4 927	4 643	4 358	4 034	3 713

Date: February 2014

System Firm Energy Demand and Dependable Resources (GWh) @ generation
NFAT 2013 Update
Keeyask/Gas40/750MW DSM Level 2

Fiscal Year		2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43	2043/44	2044/45	2045/46	2046/47	2047/48	2048/49
Power Resources																			
New Power Resources																			
	New Hydro																		
	Conawapa																		
	Keeyask	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003
1	Total New Hydro	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003	3 003
	New Thermal																		
	SCGT										1 857	1 857	1 857	1 857	3 714	3 714	3 714	5 571	5 571
	CCGT																		
2	Total New Thermal										1 857	1 857	1 857	1 857	3 714	3 714	3 714	5 571	5 571
	New Imports																		
	Contracted	1 113	1 113	1 113	1 113	186													
	Proposed																		
3	Total New Imports	1 113	1 113	1 113	1 113	186													
4	New Wind																		
5	Total New Power Resources	4 116	4 116	4 116	4 116	3 189	3 003	3 003	3 003	3 003	4 860	4 860	4 860	4 860	6 717	6 717	6 717	8 574	8 574
Base Supply Power Resources																			
	Existing Hydro	21 788	21 778	21 768	21 768	21 758	21 748	21 748	21 738	21 738	21 728	21 718	21 718	21 708	21 698	21 698	21 688	21 678	21 678
	Existing Thermal																		
	Brandon Coal - Unit 5																		
	Selkirk Gas	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953	953
	Brandon Units 6-7 SCGT	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354	2 354
	Contracted Imports																		
	Proposed Imports																		
	Hydro Adjustment																		
	Market Purchases	3 049	3 083	3 117	3 151	3 076	3 089	3 124	3 159	3 196	3 234	3 271	3 308	3 348	3 388	3 428	3 469	3 509	3 549
	Existing Wind	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771
	Pointe du Bois Rebuild	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
	Bipole III Reduced Losses	202	202	202	202	202	202	202	202	202	202	202	202	202	202	202	202	202	202
6	Total Base Supply Power Resources	29 267	29 291	29 315	29 349	29 264	29 267	29 302	29 327	29 364	29 392	29 419	29 456	29 486	29 516	29 556	29 587	29 617	29 657
7	Total Power Resources	33 383	33 407	33 431	33 465	32 453	32 270	32 305	32 330	32 367	34 252	34 279	34 316	34 346	36 233	36 273	36 304	38 191	38 231
Manitoba Domestic Load																			
	2013 Base Load Forecast	32 265	32 667	33 069	33 471	33 873	34 274	34 676	35 078	35 480	35 882	36 283	36 685	37 087	37 489	37 890	38 292	38 694	39 096
	Construction Power - Hydro	8	4																
	Less: Level 2 DSM Forecast	-3 230	-3 292	-3 352	-3 412	-3 472	-3 534	-3 582	-3 631	-3 661	-3 691	-3 722	-3 752	-3 752	-3 752	-3 752	-3 752	-3 752	-3 752
8	Manitoba Net Load	29 043	29 379	29 717	30 059	30 401	30 740	31 094	31 447	31 819	32 191	32 561	32 933	33 335	33 737	34 138	34 540	34 942	35 344
	Contracted Exports	1 389	1 389	1 389	1 389	353	145	145	145	145	145	145	145	145	145	145	145	145	145
	Proposed Exports																		
	Less: Adverse Water																		
9	Total Net Exports	1 389	1 389	1 389	1 389	353	145	145	145	145	145	145	145	145	145	145	145	145	145
10	Total Energy Demand	30 432	30 768	31 106	31 448	30 754	30 885	31 239	31 592	31 964	32 336	32 706	33 078	33 480	33 882	34 283	34 685	35 087	35 489
11	System Surplus/(Deficit)	2 951	2 639	2 325	2 017	1 699	1 385	1 066	738	403	1 916	1 573	1 238	866	2 351	1 990	1 619	3 104	2 742
12	Less : Brandon Unit 5																		
13	Adverse Water																		
	Exportable Surplus	2 951	2 639	2 325	2 017	1 699	1 385	1 066	738	403	1 916	1 573	1 238	866	2 351	1 990	1 619	3 104	2 742