
NEEDS FOR AND ALTERNATIVES TO (NFAT)

Manitoba Hydro Undertaking #13

Manitoba Hydro to file any late 2013 external population forecasts and the 2014 economic outlook.

Response:

Copies of the most recent publically available source population forecasts as of March 5, 2014 are attached.

Attachment 1 – Conference Board – November 18, 2013

Attachment 2 – Spatial Economics – January 2014 Provincial Forecast

Attachment 3 – IHS Global Insight – January 15, 2014

THE PUBLIC UTILITIES BOARD
Exhibit No. MH-93
Re: Man Hydro NFAT
March 6/2014
DATE SECRETARY

Needs For and Alternatives To (NFAT) Hearing
MH Exhibit - Attachment I

Conference Board - November 18, 2013

Mnemonic:	Description:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
USGDPK	(Average Aggregation) Gross Domestic Product at Market Prices (Billions U.S. \$ 2009)	15744.6	16229.0	16779.5	17288.1	17838.3	18367.7																		
USPGDP	(Average Aggregation) GDP Deflator (1982=100)	106.5	108.2	110.4	112.8	115.5	118.2																		
USPCPI	(Average Aggregation) Consumer Price Index (1982=100)	233.1	237.5	243.0	249.0	255.1	261.3																		
USUR	(Average Aggregation) Unemployment Rate (0000s)	7.5	7.0	6.7	6.4	6.2	6.1																		
USE	Household formations- Canada (Thousands)	144082.5	146585.2	149324.4	151614.4	153901.4	156223.0																		
HHFC	Household formations- Manitoba (Thousands)	196.4	206.8	215.5	216.0	212.7	210.8	209.4	208.7	204.8	197.9	195.9	197.0	199.1	195.7	192.6	192.4	192.8	190.9	189.5	187.3	186.8	185.4	182.9	
HHFM	(Average Aggregation) Gross domestic product at market prices (Millions- Chained \$ 2007)	7.1	7.3	7.8	7.8	7.6	7.5	7.7	7.6	7.5	7.4	7.4	7.6	7.8	7.8	7.6	7.6	7.8	7.8	7.7	7.8	7.8	7.9	8.0	
YGDPK	(Average Aggregation) Implicit Price Deflator- GDP at Market Prices (2007=1.0)	1689476.5	1728999.8	1773735.5	1816390.8	1855630.3	1889918.5	1933989.3	1975863.3	2015148.8	2057154.5	2097751.8	2138846.3	2180617.0	2223923.0	2265356.0	2307436.0	2350700.8	2393740.5	2438145.5	2483449.3	2529812.0	2576115.0	2623406.0	
PGDP	(Average Aggregation) Consumer Price Index (2002=100)	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.7	
PCPI	(Average Aggregation) Total Employment (Thousands '000s)	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.9	
E	(Average Aggregation) Unemployment Rate (0000s)	17735.8	17985.9	18304.9	18578.3	18800.7	18994.8	19167.7	19319.5	19495.0	19611.0	19752.3	19864.6	19985.8	20120.6	20258.8	20386.7	20522.0	20672.8	20819.7	20965.1	21127.3	21281.6	21445.5	
UR	(Average Aggregation) Housing Starts (Thousands '000s)	7.2	7.0	6.4	6.0	5.7	5.6	5.6	5.5	5.5	5.5	5.5	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.3	5.2	5.2	5.1	5.1	
IHS	(Average Aggregation) Canada - 3 Month Treasury Bill (0000s)	181.4	184.9	194.0	200.8	205.8	207.9	208.2	208.2	205.7	203.4	201.4	200.6	200.2	199.4	198.3	197.2	195.6	194.1	193.1	192.0	190.0	188.6	187.1	
RTB90	(Average Aggregation) United States - 3 Month Treasury Bill (0000s)	0.99	1.20	1.96	2.85	3.53	3.84	3.85	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.87	3.87	3.86	3.86	3.86	
USRTB90	(Average Aggregation) Exchange Rate (Canada/US)	0.06	0.06	0.22	1.59	3.17	3.60	3.72	3.78	3.82	3.84	3.86	3.86	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	3.87	
PFK	(Average Aggregation) Total Population (Thousands '000s)	1.03	1.04	1.02	1.02	1.02	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	
HP	(Average Aggregation) Source Population (Thousands '000s)	35095.1	35504.8	35910.1	36324.3	36742.4	37162.9	37583.4	38003.0	38420.0	38830.8	39240.4	39648.1	40052.7	40453.4	40847.9	41237.2	41620.8	41998.4	42370.0	42734.9	43093.1	43445.2	43791.8	
LP	(Average Aggregation) Canada- Federal Bonds: 10 Years (0000s)	28668.5	28995.6	29310.7	29622.4	29933.1	30245.9	30564.4	30881.7	31204.9	31536.0	31879.1	32227.6	32577.3	32927.3	33277.9	33629.9	33982.3	34334.2	34684.7	35032.4	35376.2	35715.4	36049.3	
RGOCIO	(Average Aggregation) Canada- Federal Bonds: Long-Term (0000s)	2.32	2.55	2.73	3.23	3.76	4.15	4.33	4.44	4.51	4.55	4.58	4.59	4.60	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.62	4.62	4.62	
RGOCL	(Average Aggregation) Provincial Consumer Price Index- Manitoba (2002=1.0)	2.87	2.95	3.00	3.41	3.90	4.30	4.51	4.64	4.72	4.77	4.80	4.82	4.83	4.84	4.84	4.85	4.85	4.85	4.85	4.85	4.85	4.85	4.85	
USRLONGT	(Average Aggregation) Real Gross Domestic Product (GDP) at Basic Prices by Industry- All Industries- Manitoba (Millions- Chained \$ 2007)	3.09	2.91	2.94	3.09	3.70	4.08	4.34	4.55	4.71	4.85	4.95	5.04	5.11	5.16	5.21	5.24	5.27	5.29	5.31	5.32	5.34	5.35	5.35	
RQDOM	(Average Aggregation) Employment- Total- Manitoba (Thousands \$)	51730.5	52765.8	54302.7	55616.9	56835.0	57675.0	58785.7	59816.6	60837.8	62015.3	63167.6	64402.6	65604.8	66794.2	67927.1	69110.9	70401.1	71654.0	73004.6	74408.1	75837.6	77301.0	78815.4	
RLEMM	(Average Aggregation) Employment- Total- Manitoba (Thousands \$)	635.0	642.9	655.5	668.8	676.9	684.9	691.6	697.1	702.7	708.8	715.1	720.0	725.9	731.5	737.2	743.3	749.7	756.9	764.1	771.0	778.7	786.2	794.1	
RPCPI	(Average Aggregation) Provincial Consumer Price Index- Manitoba (2002=1.0)	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.9	
RIHSM	(Average Aggregation) Housing Starts- Manitoba (Number of units)	7474.6	7484.3	7808.0	7804.0	7681.0	7560.0	7500.0	7500.0	7480.0	7490.0	7580.0	7660.0	7800.0	7780.0	7740.0	7660.0	7700.0	7740.0	7750.0	7780.0	7820.0	7900.0	7930.0	
RPYGDPM	(Average Aggregation) Implicit Price Deflator- Gross domestic product at market prices- Manitoba (Index- 2007=1.00)	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5	
RLURM	(Average Aggregation) Unemployment Rate- Manitoba (%)	5.3	5.1	5.0	4.9	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.8	4.7	4.7	4.7	4.7	4.7	4.6	4.7	
RHLSM	(Average Aggregation) Population of Labour Force Age- Manitoba (Thousands \$)	973.4	984.8	996.5	1007.8	1018.8	1029.7	1040.8	1051.8	1063.1	1074.9	1087.1	1099.6	1112.2	1124.7	1137.3	1150.4	1163.5	1176.8	1190.1	1203.4	1216.7	1229.9	1243.0	
RHM	(Average Aggregation) Total Population- Manitoba (Thousands \$)	1263.1	1278.2	1293.9	1309.8	1325.5	1341.2	1357.1	1372.8	1388.7	1404.4	1420.2	1436.0	1451.8	1467.6	1483.2	1498.7	1514.2	1529.6	1545.0	1560.2	1575.3	1590.4	1605.4	
RINMGM	(Average Aggregation) Inter-provincial In-migration- Manitoba (Thousands \$)	3923.4	4140.3	4084.0	3995.7	3909.3	3825.8	3746.7	3663.5	3585.8	3506.5	3433.3	3356.3	3270.0	3179.3	3103.5	3020.5	2938.0	2861.5	2785.3	2711.0	2638.3	2567.5	2511.5	
ROUTMGM	(Average Aggregation) Inter-provincial Out-migration- Manitoba (Thousands \$)	4901.6	4800.0	4689.5	4581.5	4476.2	4373.2	4272.8	4174.5	4078.5	3984.5	3893.0	3803.5	3716.0	3630.5	3547.0	3465.5	3386.0	3308.0	3231.8	3157.5	3084.7	3014.0	2958.0	
RHMGM	(Average Aggregation) Net International Migration- Manitoba (Thousands \$)	13.1	11.2	11.1	10.7	10.6	10.5	10.3	10.3	10.1	10.1	10.2	10.2	10.3	10.2	10.2	10.2	10.3	10.3	10.2	10.2	10.2	10.2	10.2	
RHMTRM	(Average Aggregation) Natural Rate of Population Increase- Manitoba (Thousands \$)	0.00111	0.00134	0.00139	0.00142	0.00140	0.00139	0.00141	0.00137	0.00139	0.00134	0.00132	0.00129	0.00126	0.00125	0.00121	0.00118	0.00115	0.00113	0.00111	0.00108	0.00106	0.00104	0.00103	

Spatial Economics

**Key Economic Indicators: Manitoba
January 2014 Provincial Forecast**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Real GDP (\$Millions)	55838	57005	58660	60668	62723	64395	65490	66804	67958	68929	69914	70751	71817	72753	73511	74465	75574	76717	77873	78963	79955	80874	81785
% Change	2.2	2.1	2.9	3.4	3.4	2.7	1.7	2	1.7	1.4	1.4	1.2	1.5	1.3	1	1.3	1.5	1.5	1.5	1.4	1.3	1.1	1.1
GDP Deflator (Reference Year=1)	1.077	1.098	1.118	1.137	1.161	1.188	1.213	1.238	1.264	1.291	1.319	1.349	1.379	1.411	1.443	1.477	1.514	1.55	1.588	1.625	1.663	1.7	1.736
% Change	1	2	1.8	1.7	2.1	2.4	2.1	2.1	2.1	2.1	2.1	2.3	2.2	2.3	2.3	2.3	2.5	2.4	2.4	2.4	2.3	2.2	2.2
Nominal GDP (\$Millions)	60122	62610	65575	68989	72832	76532	79438	82705	85917	89999	92195	95441	99032	102633	106106	109970	114399	118889	123634	128345	132835	137448	142019
% Change	3.2	4.1	4.7	5.2	5.6	5.1	3.8	4.1	3.9	3.6	3.6	3.5	3.8	3.6	3.4	3.6	4	3.9	4	3.8	3.6	3.4	3.3
Consumer Price Index (2007=100)	1.232	1.257	1.285	1.308	1.333	1.362	1.39	1.419	1.45	1.48	1.511	1.544	1.577	1.612	1.648	1.684	1.724	1.761	1.799	1.838	1.876	1.915	1.955
% Change	2.4	2.1	2.2	1.7	2	2.2	2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.4	2.2	2.2	2.1	2.1	2.1	2
Hourly Labour Income (\$)	26.9	27.6	28.4	29.2	30.2	31.2	32.1	33.1	34.1	35.1	36.1	37.2	38.3	39.5	40.7	42	43.4	44.9	46.5	48.1	49.7	51.3	52.8
% Change	2.1	2.6	2.8	3.1	3.3	3.2	3.1	3.1	3	3	2.9	2.9	3	3.1	3.1	3.2	3.4	3.5	3.5	3.4	3.3	3.2	3
Employment (000s)	633	641	652	669	684	694	700	707	713	717	721	723	727	730	732	735	738	741	745	747	749	750	752
% Change	0.5	1.2	1.7	2.6	2.3	1.5	0.9	0.9	0.8	0.6	0.6	0.3	0.6	0.4	0.2	0.3	0.5	0.5	0.4	0.3	0.2	0.2	0.2
Unemployment Rate (%)	5.4	5.5	5.4	5	4.7	4.8	5	5.1	5.1	5.2	5.2	5.3	5.2	5.1	5.1	5.1	4.9	4.8	4.7	4.8	4.9	5	5.1
Participation Rate (%)	68.7	68.8	68.9	69.2	69.4	69.4	69.2	69.1	68.9	68.7	68.5	68.2	68.1	67.9	67.6	67.4	67.3	67.1	67	66.8	66.7	66.5	66.3
Labour Force (000s)	689	678	689	704	718	729	737	745	751	756	760	764	767	770	772	774	776	779	782	784	787	790	792
% Change	0.5	1.4	1.6	2.2	2	1.5	1.2	1	0.9	0.6	0.6	0.4	0.5	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3
Real Hourly Labour Productivity (\$)	50.62	51.07	51.56	51.89	52.39	53.01	53.6	54.27	54.83	55.38	55.89	56.43	56.94	57.45	57.96	58.51	59.09	59.67	60.28	60.92	61.57	62.2	62.82
% Change	2.9	0.9	1	0.6	1	1.2	1.1	1.2	1	1	0.9	1	0.9	0.9	0.9	1	1	1	1	1.1	1.1	1	1
Population (000s)	1265	1280	1298.6	1322.3	1346.1	1368.5	1389.5	1408.4	1424.7	1438.8	1450.7	1461.7	1471.4	1479.9	1487.3	1493.9	1500.2	1506.2	1512.3	1518.4	1524.8	1531	1536.7
% Change	1.2	1.2	1.5	1.8	1.8	1.7	1.5	1.4	1.2	1	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Net In-Migration (000s)	9.5	9.5	12.9	17.8	17.8	16.1	14.6	12.4	9.9	7.7	5.8	5.2	4.3	3.3	2.8	2.5	2.5	2.8	3.3	3.7	4.3	4.5	4.2
% of Population	0.8	0.7	1	1.4	1.3	1.2	1.1	0.9	0.7	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Households (000s)	499.6	507	515.8	526.2	536.6	546.5	556.1	564.8	572.5	579.2	585.1	590.6	595.9	600.5	604.8	608.7	612.6	616.3	620	623.8	627.6	631.4	634.9
% Change	1.4	1.5	1.7	2	2	1.8	1.8	1.6	1.4	1.2	1	0.9	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Household Formation (000s)	7	7.4	8.8	10.4	10.4	9.8	9.6	8.7	7.7	6.7	5.9	5.5	5.3	4.7	4.2	3.9	3.9	3.7	3.7	3.7	3.8	3.7	3.6
Housing Starts (000s)	7.5	7.2	8.1	9.6	10.5	10.3	10	9.6	8.6	7.6	6.7	6.1	5.8	5.4	4.9	4.5	4.3	4.2	4.2	4.2	4.2	4.2	4.1
3 Month T-Bill Rate	1	1.2	2.3	3.4	3.6	4.1	4.2	4.2	4.3	4.5	4.4	4.4	4.5	4.6	4.6	4.5	4.6	4.5	4.2	4.1	4	3.8	3.8
Exchange Rate \$US	1.03	0.935	0.934	0.934	0.923	0.923	0.92	0.916	0.914	0.913	0.911	0.909	0.908	0.907	0.906	0.904	0.903	0.91	0.912	0.912	0.911	0.909	0.907

Manitoba						
	2013	2014	2015	2016	2017	2018
Other Data						
Source Population (Thousands)	976	987	996	1,006	1,015	1,024
Participation Rate (%)	68.6	68.8	69.4	69.7	69.8	69.7
Labour Force (Thousands)	670	679	691	701	708	713
Employment (Thousands)	634	643	654	664	670	675
Unemployment (Thousands)	36	36	37	37	38	38
Unemployment Rate (%)	5.4	5.3	5.3	5.3	5.4	5.4
Average Wage \$s per Year	45,674	46,540	47,668	48,824	49,870	51,430
CPI 2002 = 100	123.0	125.1	127.4	129.9	132.4	134.9
Total Motor Vehicle Sales	55,248	55,084	55,666	55,662	55,351	54,800
GDP at Market Prices (Millions of dollars)	60,122	62,470	65,244	68,136	71,248	74,460
GDP Price Index (2007 = 1.00)	1.081	1.100	1.119	1.140	1.163	1.187
GDP at Market Prices (Millions of Chained 2007 dollars)	55,593	56,816	58,296	59,792	61,265	62,724
Housing Starts	7,435	7,151	6,646	6,487	6,566	6,306
Population (Thousands)	1,265	1,280	1,293	1,306	1,320	1,333
Births (Thousands)	16	16	16	17	17	17
Deaths (Thousands)	11	11	11	12	12	12
Net Migration (Thousands)	10	10	8	8	8	8
Crude Birth Rate (%)	12.59	12.68	12.62	12.67	12.57	12.50
Crude Death Rate (%)	8.50	8.58	8.76	8.83	8.83	8.86
Households (Thousands)	492	498	505	511	517	523
Goods GDP (GDP by Industry at basic prices, millions of chained 2007 dollars)	15,381	15,562	15,863	16,264	16,570	16,913
Services GDP (GDP by Industry at basic prices, millions of chained 2007 dollars)	36,471	37,416	38,485	39,478	40,536	41,550