Manitoba Wildlands Analysis of Recommendations -

Report on Public Hearings - Wuskwatim Generation and Transmission Projects

(Clean Environment Commission (CEC), September 2004) Created: February 1, 2005

<u>Legend</u>

See 'Legend' Sheet below

CEC Recommendation		Consistent with Issue Raised/Recommended by MB Wildlands	Source for Participant Issue / Recommendation
JNFAAT Recommendations			
6.1 - Re: requiring JNFAAT filings for major hydroelectric projects to include an analysis of all risks, including business risks	YES	YES	MW Presentation - Eliabeth May (related to NAFTA); MW Presentation - Timothy Rudnicki (related to business as usual vs. alternatives scenarios)
6.2 - Re: PUB should review the actual revenues and costs of Projects relative to forecast, along with the impact of Projects on Manitoba Hydro's financial stability and its domestic rates	YES		MW JNFAAT Interrogatories CNF/MH/NCN I – JFNAAT – EXP #340a
6.3 - Re: requiring JNFAAT filings for major hydroelectric development projects to include internal-rate-of-return-analyses of the project that have been conducted from both a Project perspective and Manitoba Hydro's corporate perspective	YES		
6.4 - Re: requiring JNFAAT filings for major hydroelectric development projects to employ a portfolio approach for assessing resource options, which include consideration of hydroelectric sequencing as well as coordinated implementation of other initiatives such as DSM programs and SSE projects	YES	YES	MW Close (pg. 17); MW EIS Interrogatories CNF/MH/NCN I – JFNAAT – EXP #341d, CNF/MH/NCN I – JFNAAT – WIND #346 - #355, CNF/MH/NCN I – JFNAAT – ALT #358b & 358c. CNF/MH/NCN I – JFNAAT – METH #384a - #385c; MW Presentation - Ellen Anderson; MW Presentation - Gary Kubly; MW Presentation - Elizabeth May; MW Presentation - Patrick McCully; MW Presentation - James Nichols
6.5 - Re: requiring Manitoba Hydro to review its non-utility generation policy and its rate structure to ensure that all possible steps are being taken to promote economic nonutility generation	YES		

EIS Recommendations -		
Environmental License for the		
Generation Project		
7.1A - Hydrological Requirements -		
nominal forebay water level elevation of		
234.0 m asl.		
7.1A - Hydrological Requirements -		
Maximum permissible daily flow change		
through the generation station of 330 m3/s		
under normal operation and 440 m3/s		
under temporarily modified operation.		
7.1A - Hydrological Requirements -		
Maximum daily drawdown of the		
immediate forebay under normal operating		
conditions of 0.13 m.		
7.1A - Hydrological Requirements -		
Maximum daily drawdown of Wuskwatim		
Lake under normal operations of 0.08 m.		
7.1A - Hydrological Requirements -		
Operation in accordance with all existing		
licenses and agreements for the Churchill-		
Burntwood waterway system and Lake		
Winnipeg Regulation (LWR).		
7.1A - Hydrological Requirements -		
Minimum forebay water level under		
abnormal or emergency operation of 233.0		
m asl.		
7.1A - Hydrological Requirements -		
Immediate notification of the regulator of		
any operation under emergency and and		
the resulting flow changes, and the	YES	
magnitude of upstream and downstream		
water-level fluctuations.		
7.1A - Hydrological Requirements -		
Frequent reporting to the regulator of		
information relating to pertinent generation		
station operations including, but not limited		
to, flows through the station, water spilled,		
	YES	
operation, upstream and downstream		
water-level fluctuations, and any deviation		
in operation and water-level fluctuations		
from that predicted in the licensing		
applications for the Projects. This		

information should be readily and easily available to the public.			
operations. This should include a comparison to effects predicted in the licensing applications for the Projects. This information should be readily and easily available to the public.	YES		
7.1B-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to document evolving baseline conditions and provide reference information for future hydroelectric developments	YES	YES	MW EIS Interrogatories CNF/MH/NCN I – EIS – LAND #95b & #95c (Round One, Section II Ecosystems & Land Use); MW Presentation - Elizabeth May
7.1B-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change topredict whether established thresholds will be exceeded and take action to prevent exceedences	YES	YES	MW EIS Interrogatories (various) e.g. CNF/MH/NCN I – EIS – BIRD #145b (Round One Section III Species), CNF/MH/NCN I – EIS – CEA #285 (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne
thresholds for VECs, where such thresholds are not already established	YES	YES	MW EIS Interrogatories (various) e.g. CNF/MH/NCN I – EIS – METH #318 - #321c (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; BFN/MW Presentation - Dr. James Schaefer
7.1B-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to assess the accuracy of the assessments with respect	YES	YES	MW Interrogatories (various) e.g. CNF/MH/NCN I – EIS – ECO FUNC #86a - #86c (Round One, Section II Ecosystems & Land Use); MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; BFN/MW Presentation - Dr. James Schaefer

to environmental effect identification and measurement			
7.1B-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to evaluate the effectiveness of mitigation measures for the assessment of future hydro-electric developments	YES	YES	MW Interrogatories (various) - e.g. CNF/MH/NCN I – EIS – ECO FUNC #84b (Round One, Section II Ecosystems & Land Use); ; MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; BFN/MW Presentation - Dr. James Schaefer
7.1B-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to measure residual environmental effects and cumulative environmental effects and confirm the determinations of insignificant project and cumulative effects	YES	YES	MW EIS Interrogatories (various) e.g. CNF/MH/NCN I – EIS – HSI #329a - #329h (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; BFN/MW Presentation - Dr. James Schaefer
7.1B-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to verify predictions in the Environmental Impact Statement (EIS) documents and reevaluate significance if predictions cannot be verified	YES	YES	MW EIS Interrogatories (various) e.g. CNF/MH/NCN I – EIS – CEA #294 - #297 (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; MW Presentation - Dan Soprovich; BFN/MW Presentation - Dr. James Schaefer
7.1B-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to provide periodic reports on the effects of the Projects on enduring features, biodiversity, ecological integrity and sustainability.	YES		MW Close (pg. 19); MW EIS Interrogatories CNF/MH/NCN I – EIS – CEA #276 - #279 (Round One Section IV Project Design and Methods), CNF/MH/NCN I – EIS – CEA #292 (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; BFN/MW Presentation - Dr. James Schaefer
7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on the rate of shoreline erosion of Wuskwatim Lake on an ongoing basis until rates of erosion return to pre-CRD rates	YES	YES	MW EIS Interrogatories CNF/MH/NCN I – EIS – ECO FUNC #82 (Round One Section II Ecosystems & Land Use)

7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on concentration and downstream extent of sediment transport after completion of	YES	YES (sedimentation issue)	MW Presentation - Patrick McCully
construction of the Project until total sediments approach pre-CRD levels			
7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation,			
monitoring, and reporting should focus on riverbank erosion downstream from			
Wuskwatim Lake along the Burntwood River during construction and for a	YES		
reasonable period of time after. Additional			
mitigation should be implemented as necessary to control the rate of erosion			
7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation,			
monitoring, and reporting should focus on concentration and downstream extent of			MW Interrogatories CNF/MH/NCN I – EIS – LAND #95a
TSS in the Burntwood and lower Nelson rivers on a regular basis so that up-to-date	YES		(Round One Section II Ecoystems & Land Use)
baseline reference data are available at the time of commencement of construction			
of the Generation Project 7.1B-2 - Environmental Protection Plan			
Requirements - Specific mitigation,			
monitoring, and reporting should focus on sediment transport on a regular basis			
during the construction period to determine the effects on water quality and the extent	YES		
of downstream movement of these sediments. Monitoring should be more			
frequent during cofferdam construction and removal.			
7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation,			MW Close (pg. 19, 20); MW Gen EIS Comments (pg. 25); MW EIS Interrogatories CNF/MH/NCN I – EIS – REG #13b & #13c (Round One Section I Participation
monitoring, and reporting should focus on woodland caribou population, distribution and behaviour during construction and operation	YES	YES (specific rec in MW Gen EIS Comments)	and Policy), CNF/MH/NCN I – EIS – ECO FUNC #67a - #68g (Round One Section II Ecosystems & Land Use), CNF/MH/NCN I – EIS – CAR #157a - #205 (Round One Section III Species); MW Presentation - Erin Bayne;
			BFN/MW Presentation - Dr. James Schaefer

7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on fish production in Wuskwatim Lake and the region to verify the prediction that the Generation Project will result in an increase in fish production. The investigation should monitor fish harvests in Wuskwatim Lake in connection with that investigation.	YES		
7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on integrity of protected areas during construction and operation	YES		MW EIS Interrogatories CNF/MH/NCN I – EIS – PUB POL #12 (Round One Section I Participation and Policy)
7.1B-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on greenhouse-gas emissions and their effects during construction and operation.	YES	YES (specific rec in MW Close)	MW Gen EIS Comments (pg. 41); MW Close (pg. 23); MW Presentation - Elizabeth May; MW Presentation - Patrick McCully
7.1B-3 - Environmental Protection Plan Requirements - EPPs should incorporate sustainability indicators for biophysical, socio-economic and cultural conditions	YES		
7.1B-3 - Environmental Protection Plan Requirements - EPPs should incorporate an adaptive approach to environmental monitoring	YES		
7.1B-3 - Environmental Protection Plan Requirements - EPPs should incorporate the principles and guidelines of sustainable development, taking into consideration the holistic view of sustainable development.	YES		MW EIS Interrogatories, CNF/MH/NCN I – EIS – PUB POL #9 (Round One Section I Participation and Policy)
7.1B-4 - Environmental Protection Plan Requirements - Manitoba Hydro and NCN should be required to report on the implementation of environmental protection plans annually, and to ensure that such reports are readily and easily accessible to stakeholders and to the general public.	YES		MW Close; MW EIS Interrogatories (various);

 7.1B-4 - Environmental Protection Plan Requirements - Manitoba Hydro and NCN should be required to document the application of TSK during construction and operation of the Project. 7.1B-5 - Environmental Protection Plan 	YES		
Requirements - Manitoba Hydro and NCN should be required to implement the Fish Habitat Compensation Plan monitoring program (as proposed to federal regulators)	YES		MW EIS Interrogatories CNF/MH/NCN I – EIS – REG #16, #17 (Round One Section I Participation and Policy)
7.1B-5 - Environmental Protection Plan Requirements - Manitoba Hydro and NCN should be required to implement the Aquatic Effects Monitoring Program (as proposed to federal regulators)	YES		MW Gen EIS Comments (pg. 33); MW EIS Interrogatories CNF/MH/NCN I – EIS – REG #20a - #22d (Round One Section I Participation and Policy)
7.1B-5 - Environmental Protection Plan Requirements - Manitoba Hydro and NCN should be required to implement Sediment Management Plan monitoring program (as proposed to federal regulators)	YES		
7.1C - Employment / Training Requirements - the licence should require Manitoba Hydro and NCN to monitor and report annually on First Nations, other Aboriginal people and northern Manitoba hiring for the Generation Project to Manitoba Advanced Education and Training. The results should also be published in Manitoba Hydro's annual report. The reports should also include results of the effectiveness of the training, life-skills and on-site counselling programs.	YES	YES	MW Gen EIS Comments (pg. 38)
7.1C - Employment / Training Requirements - the licence should require Manitoba Hydro and NCN to include Manitoba Hydro's employment and training terms and conditions in contract specifications and operational procedures for the Generation Project. The contracts and procedures should be audited by Manitoba Advanced Education and Training and the results should be readily available to the public.	YES		

EIS Recommendations - Environmental License for the Transmission Project			
7.2A-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to document evolving baseline conditions and provide reference information for future hydroelectric developments	YES	YES	MW EIS Interrogatories CNF/MH/NCN I – EIS – LAND #95b & #95c (Round One, Section II Ecosystems & Land Use); BFN/MW Presentation - Dr. James Schaefer
7.2A-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to predict whether established thresholds will be exceeded and take action to prevent exceedences	YES	YES	MW EIS Interrogatories (various) e.g. CNF/MH/NCN I – EIS – BIRD #145b (Round One Section III Species), CNF/MH/NCN I – EIS – CEA #285 (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; BFN/MW Presentation - Dr. James Schaefer
7.2A-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to determine thresholds for VECs, where such thresholds are not already established	YES	YES	MW EIS Interrogatories (various) e.g. CNF/MH/NCN I – EIS – METH #318 - #321c (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; BFN/MW Presentation - Dr. James Schaefer
7.2A-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to assess the accuracy of the assessments with respect to environmental effect identification and measurement	YES	YES	MW EIS Interrogatories (various) e.g. CNF/MH/NCN I – EIS – ECO FUNC #86a - #86c (Round One, Section II Ecosystems & Land Use), CNF/MH/NCN I – EIS – CEA #286 (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; MW Presentation - Dan Soprovich; BFN/MW Presentation - Dr. James Schaefer
7.2A-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to evaluate the effectiveness of mitigation measures for the assessment of future hydroelectric developments	YES	YES	MW EIS Interrogatories (various) - e.g. CNF/MH/NCN I – EIS – ECO FUNC #84b (Round One, Section II Ecosystems & Land Use), CNF/MH/NCN I – EIS – CEA #286 (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; MW Presentation - Dan Soprovich; BFN/MW Presentation - Dr. James Schaefer

7.2A-1 - Environmental Protection Plan Requirements - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to measure residual environmental effects and cumulative environmental effects and confirm the determinations of insignificant project and cumulative effects	YES	YES	MW EIS Interrogatories CNF/MH/NCN I – EIS – ECO FUNC #49a, #50 (Round One Section II Ecosystems & Land Use), CNF/MH/NCN I – EIS – HSI #325a - #328f (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; MW Presentation - Patrick McCully; MW Presentation - Dan Soprovich; BFN/MW Presentation - Dr. James Schaefer
7.2A-1 - Environmental Protection Plan Requirements - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to verify predictions in the Environmental Impact Statement (EIS) documents and reevaluate significance if predictions cannot be verified	YES	YES (very specifc rec in MW Close)	MW Close (pg. 20); MW EIS Interrogatories CNF/MH/NCN I – EIS – CEA #294 - #297 (Round One Section IV Project Design and Methods); MW Presentation - Erin Bayne; MW Presentation - Dan Soprovich; BFN/MW Presentation - Dr. James Schaefer
7.2A-1 - Environmental Protection Plan Requirements - mitigation, monitoring, and reporting of effects on VECs and other indicators of change to provide periodic reports on the effects of the Projects on enduring features, biodiversity, ecological integrity and sustainability.	YES	YES	MW Close (pg. 19); MW Trans EIS Comments (pg. 8); MW EIS Interrogatories CNF/MH/NCN I – EIS – CEA #276 - #279 (Round One Section IV Project Design and Methods), CNF/MH/NCN I – EIS – CEA #292 (Round One Section IV Project Design and Methods); MW Presentation - Patrick McCully; BFN/MW Presentation - Dr. James Schaefer
7.2A-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on woodland caribou population, distribution and behaviour during construction and operation	YES	YES (specific rec in MW Trans EIS Comments)	MW Close (pg. 19, 20); MW Trans EIS Comments (pg. 25, 29, 30); MW EIS Interrogatories CNF/MH/NCN I – EIS – REG #13b & #13c (Round One Section I Participation and Policy), CNF/MH/NCN I – EIS – ECO FUNC #67a - #68g (Round One Section II Ecosystems & Land Use), CNF/MH/NCN I – EIS – CAR #157a - #205 (Round One Section III Species); MW Presentation - Erin Bayne; BFN/MW Presentation - Dr. James Schaefer
7.2A-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on integrity of protected areas during construction and operation	YES	YES	MW Close (pg. 19); MW Trans EIS Comments (pg. 8); MW EIS Interrogatories CNF/MH/NCN I – EIS – PUB POL #12 (Round One Section I Participation and Policy)
7.2A-2 - Environmental Protection Plan Requirements - Specific mitigation, monitoring, and reporting should focus on greenhouse-gas emissions and their effects	YES		MW Close (pg. 23); MW Presentation - Elizabeth May; MW Presentation - Patrick McCully

during construction and operation.			
7.2A-3 - Environmental Protection Plan Requirements - EPPs should incorporate sustainability indicators for biophysical, socio-economic and cultural conditions	YES		
7.2A-3 - Environmental Protection Plan Requirements - EPPs should incorporate an adaptive approach to environmental monitoring	YES	YES	MW EIS Interrogatories, CNF/MH/NCN I – EIS – ECO FUNC #49b (Round One Section II Ecosystems and Land Use)
7.2A-3 - Environmental Protection Plan Requirements - EPPs should incorporate the principles and guidelines of sustainable development, taking into consideration the holistic view of sustainable development.	YES	YES	MW EIS Interrogatories, CNF/MH/NCN I – EIS – PUB POL #9 (Round One Section I Participation and Policy)
7.2B - Employment / Training Requirements - the licence should require MB Hydro and NCN to monitor and report annually on First Nations, other Aboriginal people and northern Aboriginal people and northern Manitoba hiring for the Transmission Project to Manitoba Advanced Education and Training. The results should also be published in Manitoba Hydro's annual report. The reports should also include results of the effectiveness of the training, life-skills and on-site counselling programs.	YES		
7.2B - Employment / Training Requirements - the licence should require MB Hydro and NCN to include Manitoba Hydro's employment and training terms and conditions in contract specifications	YES		

EIS Recommendations - Environmental License for the Generation and Transmission			
Projects 7.3 - Recopmmendation that Manitoba Hydro consult with the Manitoba Metis Federation on matters of mutual interest pertaining to the Projects. Progress on these consultations should be included in the public involvement plan for the Projects and reported on by Manitoba Hydro and Manitoba Hydro and Nisichawayasihk Cree Nation along with other aspects of the plan.	YES	YES	MW Interrogatories CNF/MH/NCN I – EIS – LAND #102 (Round One Section II Ecosystems and Land Use)
7.4 - Recommendation that Manitoba Hydro and NCN and consult with	YES	YES	MW Interrogatories CNF/MH/NCN I – EIS – LAND #102 (Round One Section II Ecosystems and Land Use); MW Presentation - Dr. Peter Kulchyski
7.5 - Recommendation that Manitoba Hydro, Nisichawayasihk Cree Nation and the Community Association of South Indian Lake renew their efforts to resolve the issues that stand between them in regard to the Generation Project and other related matters.	YES	YES	MW Interrogatories CNF/MH/NCN I – EIS – LAND #96 (Round One Section II Ecosystems and Land Use); MW Presentation - Dr. Peter Kulchyski
7.6 - Recommendation that The Government of Manitoba require Manitoba Hydro to resolve all outstanding issues with regard to the Churchill River Diversion, the Augmented Flow Program and Lake Winnipeg Regulation. Following resolution of these issues, Manitoba Hydro should apply for the appropriate final licences for these three operations under The Environment Act and The Water Power Act as soon as possible.	YES		

7.7 - Recommendation that the application for the approval of final licences for Churchill River Diversion, Augmented Flow Program and Lake Winnipeg Regulation should include a review of the terms and conditions, an operational review and any required environmental impact assessments. Clear guidelines should be developed with respect to what constitutes conformance to and/or violation of the terms of the licences.	YES		
provide guidance for proponents, consultants and practitioners, and establish protocols for best professional practice that includes cumulative-effects assessment.	YES		
Preparation of a sustainable-developments. Preparation of a sustainable-development strategy in accordance with provisions of The Sustainable Development Act would be an essential element of such a policy.	YES	YES	Undertaking MH-31 regarding Manitoba Hydro Climate Change policy was requested by MB Wildlands during the March 9, 2004 Wuskwatim hearing
7.10 - Recommendation that future environmental impact statement submissions for large-scale hydroelectric developments should directly address the Government of Manitoba's Sustainable Development Code and its Financial Management Guidelines. The submissions should also develop appropriate sustainability indicators for use in identifying and assessing environmental effects, and conducting environmental monitoring.	YES	YES	MW EIS Interrogatories, CNF/MH/NCN I – EIS – PUB POL #11e & #11f (Round One Section I Participation and Policy)