

MH/WCW-1038

EXHIBIT #
WUSKWATIM GENERATION
& TRANSMISSION PROJECT

R.G.

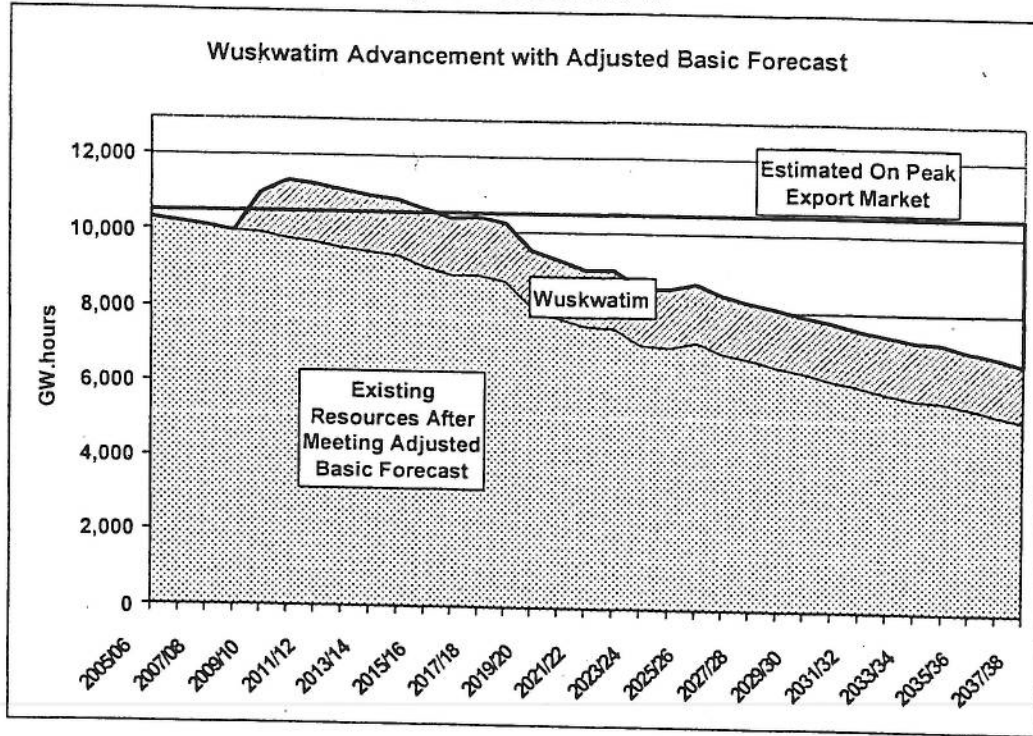
CLEAN ENVIRONMENT COMMISSION

Cross-Examination

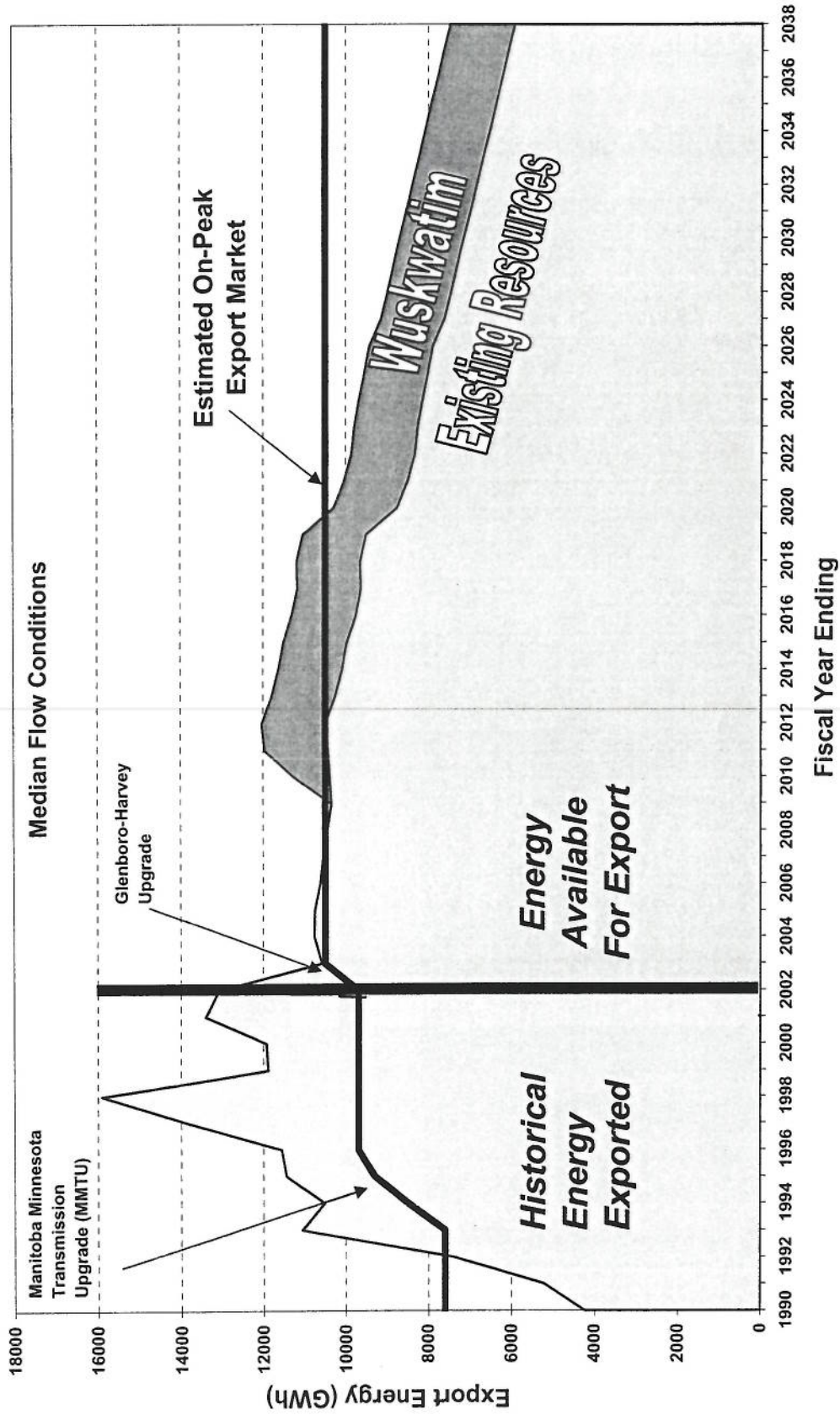
Reference material
Manitoba Hydro/WCW

May 13, 2004

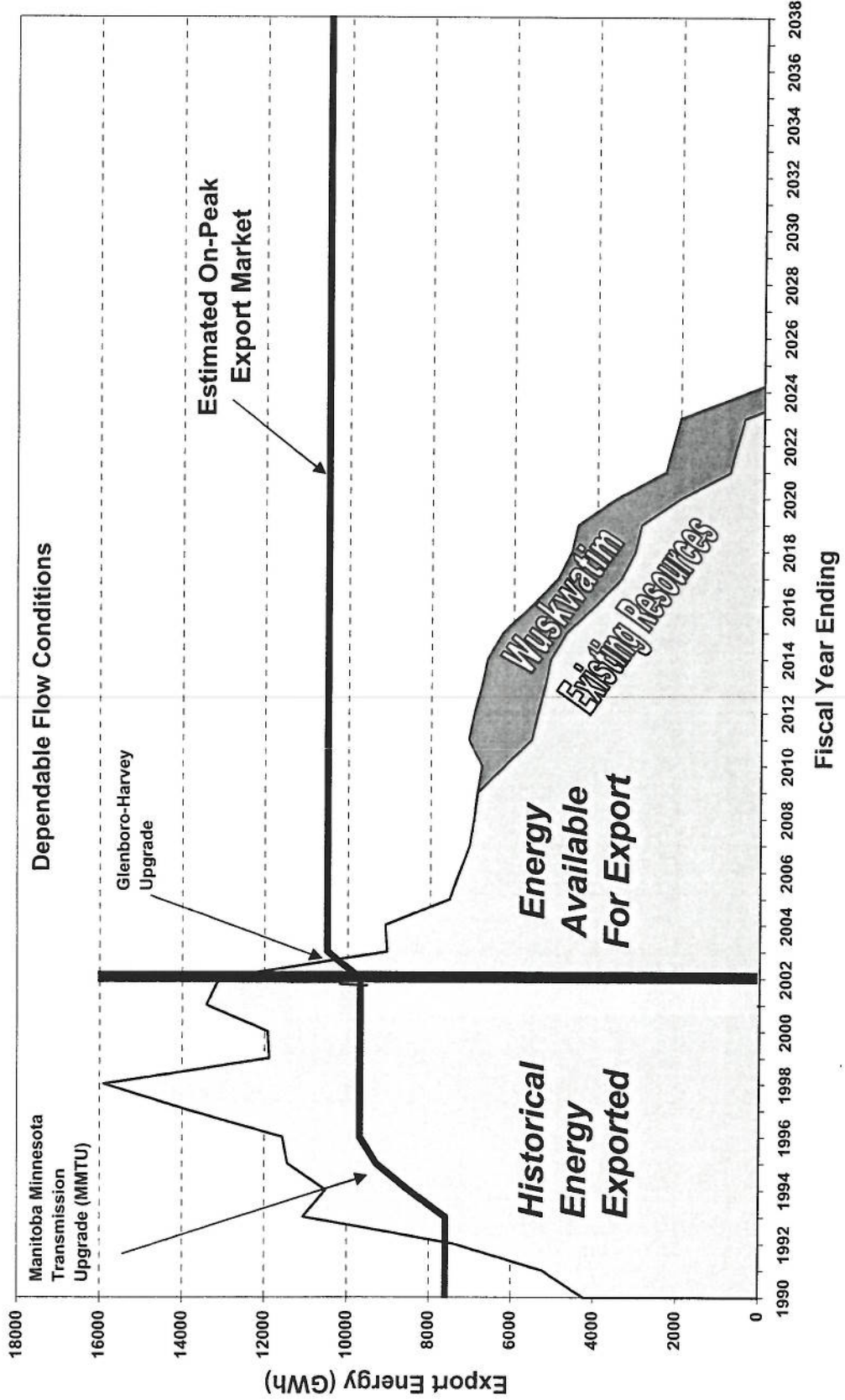
Figure TREE/RCM CNF 4.1



Energy Available For Export Medium-Low Load Growth Scenario



Energy Available For Export Medium-Low Load Growth Scenario



MH-NCN-NFAAT-S-2a
Revised: January 16, 2004

TABLE S6.5
WUSKWATIM PROJECT SENSITIVITY ANALYSIS

Sequence Assumption		IRR (Real)	Difference from "A"
A.	Wuskwatim Long-Term Economics – Expected Export Prices	10.3%	
B.	Wuskwatim Advancement (2009 vs. 2020) – Expected Export Prices	10.3%	
Low and High Export Price Forecasts			
C.	LOW Export Price Forecast	8.0%	-2.4%
D.	HIGH Export Price Forecast	12.1%	1.8%
Reference and Environmental Export Price Forecasts			
E.	Reference Forecast (No Environmental Export Premium)	9.2%	-1.1%
F.	LOW Environmental Export Premium Forecast	10.2%	-0.1%
G.	MEDIUM Environmental Export Premium Forecast	10.9%	0.5%
H.	HIGH Environmental Export Premium Forecast	11.4%	1.1%
Sensitivities to Wuskwatim Long-Term Economics – Expected Export Prices			
I.	Capital Cost INCREASE of 15% (\$95 million)	9.2%	-1.1%
J.	Capital Cost DECREASE of 15% (\$95 million)	11.7%	1.4%
K.	10% Flow Reduction on the Burntwood River at Wuskwatim	9.8%	-0.5%
L.	+300 MW Interconnection Capability Adjustment	10.5%	0.2%
M.	-300 MW Interconnection Capability Adjustment	10.0%	-0.3%
N.	Wuskwatim 2010 ISD with added Costs during delay (NPV cost of \$28.4 million, 2002 present value dollars)	10.2%	-0.1%
AA.	Combination of low export price, 15% capital cost increase and 10% flow reduction (C, I and K) - CEC/MH/NCN I - NFAAT - 37a	6.6%	-3.7%
Sequence Assumption		IRR (Real)	Difference from "B"
B.	Wuskwatim Advancement (2009 vs. 2020) – Expected Export Prices	10.3%	
Low and High Export Price Forecasts			
O.	LOW Export Price Forecast	8.5%	-1.8%
P.	HIGH Export Price Forecast	12.3%	2.0%
Reference and Environmental Export Price Forecasts			
Q.	Reference Forecast (No Environmental Export Premium)	9.6%	-0.7%
R.	LOW Environmental Export Premium Forecast	10.4%	0.1%
S.	MEDIUM Environmental Export Premium Forecast	11.0%	0.7%
T.	HIGH Environmental Export Premium Forecast	11.5%	1.2%
Sensitivities to Wuskwatim Advancement – Expected Export Prices			
U.	Impact of 250 MW of Wind (ISD - 2009)	10.25%	-0.05%
V.	Impact of increasing (2x) DSM	10.25%	-0.05%
W.	Combined impact of Wind in 2009 and Increased DSM (ie 250 MW of wind and doubling DSM)	10.2%	-0.1%
X.	Impact of System Drought (ie '87 to 91 drought repeating in 2009)	9.7%	-0.6%
Y.	Impact of 2003 Power Resource Plan Update (Wuskwatim Advancement 2009 vs. 2019)	10.2%	-0.1%
Z.	Wuskwatim 2010 ISD with added Costs during delay (NPV cost of \$30.8 million, 2002 present value dollars)	10.0%	-0.3%
BB.	Medium Low Load Growth - CAC/MSOS/MH/NCN I - NFAAT - 121b	10.0%	-0.3%
CC.	Power Resource Plan, Load forecast, capital cost and financial indicator update - CAC/MSOS/MH/NCN I - NFAAT-2b	10.0%	-0.3%

Note: Inconsistencies in differences are due to rounding.