Muskrat Falls Project Questions

1. In its load forecasting of electrical consumption, how does Hydro handle the likelihood of a switch from electrical resistance heating to oil-fired heating (at least for new construction) when increasingly greater amounts of power are produced by thermal means (as would be the case in the Isolated Island Option)? Since space heating by oil is (generally) about twice as efficient as heating by thermally generated electricity, it would not be sensible to continue to increase thermal generation for the provision of electrical resistance heating. Does the load forecast and the analysis allow for this? I could not find a reference to this in MHI's report. (Or is it assumed that thermal-fired electrical generation would continue to be subsidized at increasing amounts, at taxpayers expense, rather than have consumers use oil for heating purposes at twice the efficiency?)

2. What fuel will the planned combustion turbines (single and combined cycles) burn? If heavy oil, has the increase in maintenance and downtime costs been considered? And if heavy oil, how would the environmental issues be handled? How would they be different from the current issues with Holyrood?

If light oil, presumably the costs would be significantly greater.

3. In Prof. Feehan's (CD Howe) report, it appears that significant improvements have been achieved on environmental issues at Holyrood by burning low-sulphur oil, to the extent that he questions the need to install the emissions controls equipment, etc, particularly as the plant apparently meets the current government mandated environmental requirements. Shouldn't there be a qualifying statement in the MHI report to this effect? i.e. The plant meets regulations so why spend \$600 million in the next five years or so if the plant will be retired in 20 years? The Additions do not appear to include this control equipment in the cost analysis (see Table 3.1); shouldn't it be included?

4. I found one of the most interesting (if not troubling) statements in the MHI report to be the reference to the effect of a shut-down of the mill in Corner Brook coupled with a (not unrealistic) 10% increase in the capital cost of the MF project. Despite the statements of the government about keeping the mill running, it would not be a great stretch to suggest that the mill will close within the next decade. It seems to me that MHI's comment should be highlighted and given careful consideration.

5. Item 4, MHI's concern about the lack of rigorous reliability analysis, and its reference to the likely significant increase in transmission costs to meet the acceptable return period for design should be sufficient to raise questions at the PUB.

6. Will the debt incurred to finance the MF project affect the overall provincial debt or will it be on Nalcor's books only?

7. There has been some discussion with reference to The Upper Churchill power being available to the Island (and Maritimes, etc?) after 2041, but no mention is made of the need to build more capable transmission links for the larger amount of power. Presumably this discussion is only in the context of the concept being proven by the MF project with the recognition that significant additional costs would be required if and when Upper Churchill power is brought to the Island.

