Q. CE-27 from 1999 performs a system optimization to determine the optimal installed capacity for MF at 824 MW. This number has been carried forward but may not necessarily be optimal in the context of providing energy to the Island, a context of offsetting thermal based power, or in the context of an absence of a Gull Island Development.

Please indicate if there is an alternate layout for Muskrat Falls that could be developed at the expense of a Gull Island development that is more optimal from a cost perspective (for example an increased Dam height, with a lower design flow and higher capacity factor).

A. Nalcor does not intend to advance a Muskrat Falls development at the expense of Gull Island. Consistent with Nalcor's development plans for the entire river, the two sites are optimized in a manner to enable development of the potential of the Churchill River in the most efficient manner on the basis that both Gull Island and Muskrat Falls will be developed.

No alternative development of Muskrat Falls has been studied that would be at the expense of a future Gull Island development.

As discussed in Nalcor's response to CA/KPL-Nalcor-82, the full supply level and maximum flood level for Muskrat Falls have been established based on the future location for Gull Island dam, and are therefore constrained. This precludes increasing the dam height.

Reducing the design flow was previously addressed in the 1998 optimization studies, where a 618 MW 3 unit plant was considered, but an 824 MW 4 unit plant was ultimately selected.

Although the Terms of Reference require Nalcor's CPW analysis to be based on Island requirements without consideration of export revenue, export markets are available for energy not used domestically. As a result, Nalcor believes the 1998 optimization to still be relevant and appropriate.