Q. Please explain the difference between this generation requirement and that scheduled as part of the Labrador Infeed Option, commonly referred to as the Muskrat Falls option which has now been sanctioned.

A. This generation requirement is basically the same generation requirement as the one scheduled as part of the Labrador Infeed Option, commonly referred to as the Muskrat Falls option which has now been sanctioned, except that a 100 MW combustion turbine is now recommended, instead of the 60 MW combustion turbine previously recommended.

As discussed in the Sensitivity Analysis section (page 3) of the Executive Summary of the submission, the 60 MW CT would meet Base Case requirements for reliability. However, as a result of the system outages in early January, Hydro initiated an independent review of its generation capacity planning processes. This was conducted by Ventyx, an ABB company, and its purpose was to determine whether Hydro's planning processes should have established a requirement for additional generation capacity prior to January 2014. This review determined that the generation planning capacity processes followed accepted practices and that the installed generation capacity on the Island Interconnected System met established reliability criteria. The review, however, did result in recommendations that generation capacity addition analysis include enhanced sensitivity analysis on generating unit reliability performance and increased customer demand.

Based on the recommendations of Ventyx, Hydro expanded its 2013 Base Case analysis to include sensitivities to show the impact on capacity supply reliability with:

1. Reduced thermal generation availability;
2. Load forecast based on extreme weather; and
3. A combination of reduced availability and extreme load forecast.

The results of that analysis indicated that to meet the capacity supply reliability criteria under the assessed sensitivities, the following changes in scheduled in service and capacity size would be required:

1. Reduced thermal generation availability would require a 100 MW combustion turbine in service in December 2014 or a combination of 60 MW interruptible arrangements in service in December 2014 with a 60 MW combustion turbine installed in December 2015;
2. Load forecast based on extreme weather would require a 100 MW combustion turbine in service in December 2014; and
3. Combination of reduced availability and extreme load forecast would require a combination of a 100 MW combustion turbine and 60 MW interruptible arrangements with all in service in December 2014.

The sensitivity analysis demonstrated a reliability benefit for a 100 MW combustion turbine over the 60 MW unit. In addition, given the unit being proposed has a capacity of 120 MW and can be acquired at a cost comparable to a new 60 MW turbine, the unit is being recommended as the preferred least coat solution.