Q. Did Hydro prepare cost-benefit analyses of any of the alternatives presented in Table 2, page 5 of the Report? If yes, provide copies. If no, why not?

A. Hydro did not prepare cost-benefit analyses of any of the alternatives presented in Table 2, page 5 of the Report.

As noted in the Report on page 2, a previous cost-benefit analysis had been carried out identifying a combustion turbine (CT) as the next least cost generation source:

The analysis indicated that, based on available generation options, the least cost long term option to meet the additional capacity requirement in 2015 was a 50 MW (nominal) combustion turbine. A recent review of the customer demand forecast and generation availability assumptions confirmed this replacement with a 60 MW (nominal).

As a result of the system supply issues experienced in early January 2014, Hydro initiated an independent review of its generation capacity planning processes. 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 these, 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.

Of the alternatives presented in Table 2, page 5 of the Report, alternatives not including a 100 MW combustion did not meet these requirements. As all of the alternatives that did meet these requirements included a 100 MW combustion turbine, no cost-benefit analysis was required to support the proposed installation of a 100 MW (nominal) CT and balance of plant at the Holyrood Generating Station location to be in service late in 2014.