1 Q. Project B-25, Replace Emergency Diesel Generator (Bay d'Espoir):

At Volume II, Tab 9, page 8, Section 3.5, Hydro describes a procedure relating to the black start condition in 2003, where the diesel mechanic had to manually operate the diesel engine governing unit. Hydro describes the procedure as both unsafe for the mechanic and creating a risk of equipment damage. Was the need to use this procedure in 2003 due to the generator being 200 kW in size, or due to other problems with the generator? If due to other problems, were these addressed by Hydro by the partial overhaul in 2003?

Α.

The need to use the manual procedure in 2003 to operate the diesel engine governing unit was not due to the generator being 200 kW in size. It was due to another problem with the generator, specifically a problem with the mechanical governor.

This problem was partially addressed by Hydro during the overhaul performed in 2003. At that time, the mechanical governor was repaired but not with the proper originally designed parts because they were no longer available. In addition, the availability of other replacement parts is also limited. When the genset is running at full capacity, it is insufficient to meet the plant essential service requirements during a black start condition. This results in a requirement to shed lower rated essential service loads so the 200 kW genset output can be directed to the highest priorities.