Q. With reference to the Project C-8, Upgrade Governor Controls Units 1 and 2 –

Holyrood, at page 10 of the report filed in support of this Project (Volume I, Tab 3),

Hydro states that no alternatives were evaluated. Hydro does identify as a potential alternative to this Project replacement with a controller manufactured by another company. Can Hydro say, without having evaluated the alternative of a controller manufactured by another company, that such an alternative would have been as costly or more costly than the Project proposed?

A.

Hydro contacted another company for the cost of supplying a turbine controller. The base cost of the controller was \$398,700 per unit or \$797,400 for both units. This would include the hardware, software and engineering services. The cost for the General Electric migration from Mark V to Mark VIe is \$329,650 per unit or \$659,300 if both migrations take place at the same time. A software acceptance test of \$8,520 would be added, for a total GE cost of \$667,820. If installation is at different times, the cost is estimated to increase by \$11,000 to give a total cost of \$678,820. A credit of \$25,000 will also be received for return of the Mark V parts to GE.

The supply of a turbine controller from a company other than GE will require existing cables to be disconnected from the cabinet terminals, removal of the existing cabinets and termination of the removed cables in the new cabinets. This will involve increased cost for contracted installation work. A migration from the Mark V to the Mark VIe allows for minimal disruption and down time as the field wiring is not impacted and existing cabinets are reused. The Mark V software will be translated to the Mark VIe software during the engineering work.