Q. Reference: 2017 General Rate Application, response to Request for Information PUB-NLH-046.

"Currently, Hydro dispatches its resources and agreements to achieve a spinning reserve equal to the capacity of the largest generating unit. As noted in Footnote 52 on page 3.23, for the current system this is equal to 170 MW when Unit 1 or Unit 2 at Holyrood is on line and 154 MW when Holyrood is not on-line (the latter is the capacity of Bay d'Espoir Unit 7). This enables Hydro to position the system to be able to restore customers quickly in the event of the loss of the largest generating unit. Hydro also maintains an additional reserve of at least 70 MW for a total available reserve equal to or greater than the largest generating unit plus 70 MW."

Please confirm that, for the current system, spinning reserve would only be equal to 170 MW when either Unit 1 or Unit 2 at Holyrood is on line and operating without any deratings. If not confirmed, why not?

A.

Hydro targets a spinning reserve to cover the loss of the largest unit. As noted in Footnote 52 on page 3.23, for the current system this is equal to 170 MW when Unit 1 or Unit 2 at Holyrood is on line and 154 MW when Holyrood is not on-line (the latter is the capacity of Bay d'Espoir Unit 7). There are periods when the largest Holyrood units (170 MW) are derated or off-line and Bay d'Espoir Unit 7 is the largest unit (154 MW). As the system is dynamic and experiences rapid changes in customer demand, this drives generation requirements during the on and off-peak periods (in particular during the months of late fall, winter and early spring when overall customer demand is highest).

- 1 Hydro generally maintained a minimum target of 170 MW during these months. The
- 2 spinning reserve target lines in the figures in Appendix B of its Application, Specific
- 3 Examples of the Requirement for Standby Generation, are used to provide guidance for the
- 4 staffing of standby units and to provide an indication of operating requirements. Hydro's
- 5 ECC operators respond in real time, based on system conditions, to dispatch these units as
- 6 required to maintain minimum reserve requirements. Note however, that Hydro did move
- 7 its minimum target to 150 MW outside of this period as illustrated in Figures 16, 24, 26, 28
- 8 and 30 in Appendix B of its Application, Specific Examples of the Requirement for Standby
- 9 Generation.