

1 Q. **Reference: Addendum Capital Expenditures and Carryover Report, Page 58**

2 Replace Failed Jetty Bumper Timbers Hydro stated a drone inspection was completed which
3 identified failure of the wooden bumpers. Please explain how Hydro uses drones as part of its
4 inspection programs for assets and whether any reduction in costs has been identified as a
5 result of the use of drones.

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8 A. In recent years, Newfoundland and Labrador Hydro (“Hydro”) has availed of the use of drones
9 across various inspection programs. On top of the potential for cost savings, which Hydro is still
10 evaluating, drones have reduced risk to employees by removing the requirement to work at
11 heights, in hazardous areas, in confined spaces, etc. The following are some recent examples of
12 the use of drones during inspections conducted by Hydro, all of which have resulted in
13 significant reductions in risk:

- 14 ● Coating inspection of Surge Tank 3 at the Bay d’Espoir Hydroelectric Generating Facility;
- 15 ● Visual inspection of Stage 1 and 2 Pumphouse circulating water sumps at the Holyrood
16 Thermal Generating Station (“Holyrood TGS”);
- 17 ● TL271 Lidar data and aerial imagery collection;
- 18 ● L23/24 230 kV steel tower inspection;
- 19 ● Holyrood TGS exhaust stack inspections;
- 20 ● Lidar data collection and aerial imagery for southern Labrador transmission and
21 distribution;
- 22 ● Canal and reservoir inspections for ice cover;
- 23 ● Rock cut inspections not easily accessible around powerhouse facilities;
- 24 ● Vegetation inspections on dams;
- 25 ● Penstock inspections to review for movements in overburden and other signs of
26 abnormalities; and

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- Dyke/dam inspections in areas that are not easily accessible by land.