Q. Reference: At page 36 of the report, Liberty states that "The receiver tanks remained exposed to weather for a long, one-month period."

Liberty acknowledges on page 36 of its report that, "Hydro reported that it had secured waterproof covers over the tank and the driving rod", yet Liberty indicates that the receiver tanks remained exposed to weather for a long, one-month period. Please describe what Liberty means by the receiver tanks remaining "exposed to weather for a long one-month period" and the basis on which it makes that statement.

A. Hydro's responses to Liberty's RFI's (PR-PUB-NLH-66, 67, and 68) date the period during which the Holyrood breaker B1L17 remained disassembled from February 24/25 to March 23, 2013. The information provided by Hydro indicate placement of a waterproof cover over the tanks and the driving rods. The information provided by Hydro also indicates that tests performed following the reassembly of the breaker were not designed to detect water in the receiver tanks. Hydro determined that moisture may have entered the phase A receiver tank during the one month the breaker was disassembled. Hydro could not provide any other explanation for the water/ice found in the receiver tank following the failure of this breaker to operate properly.

The receiver tanks became "exposed to weather" because of disassembly and the fact that the receiver tanks were not filled with dry air under high pressure (as opposed to their normal operating condition). The use of temporary waterproof covers does not provide adequate protection of receiver tank parts from exposure to weather. The air in the receivers could have been wet when they were covered, or the cover material or the sealing used could have allowed wet air or water to enter the receiver directly, by osmosis, or by exchange of air caused by temperature changes or by wind. Hydro did not take effective preventive measures, such as reducing the exposure time to a maximum of several days, inspecting the covers and cover sealing on a daily basis, applying a slight positive pressure of dry air in the receiver tanks, placing silica gel in the receivers to absorb moisture, heating the receiver tank air above freezing to evaporate free water and then conducting dew point tests, purging the receivers with dry air multiple times before reassembling, or a combination of such measures.