

1 Q. In reference to Holyrood breaker B1L17, please state the dates in 2013 when the
2 breaker was disassembled and then reassembled for applying the silicone coating
3 on the insulators and if the duration was more than 3 days, explain why Hydro
4 allowed the breaker to be dissembled for an extended time.

5

6

7 A. As part of improving breaker B1L17's performance for salt contamination, it was
8 decided to coat the insulators of the breaker with Room Temperature Vulcanizing
9 (RTV) coating. The process to complete the coating of the insulators required the
10 insulators and columns to be removed and transported to a local shop to have the
11 work performed in a conditioned climate. Completing the work in the most
12 efficient way required all the breaker phase insulators removed and coated at the
13 same time.

14

15 As with this procedure, the receiver tanks, located underneath the breaker head
16 columns and interrupting chambers, would be exposed to the weather elements.
17 Hydro ensured that they were securely covered to address the issue of potential
18 moisture ingress from snow and rain.

19

20 During the period that Holyrood B1L17 was removed from service to carry out the
21 necessary work to coat the breaker with RTV, all columns and interrupting heads
22 were removed and sent to the Whitbourne shop. Once coated, the insulators and
23 columns were returned to the Holyrood station to be re-assembled. After being re-
24 assembled, the breaker went through a complete set of tests to check timing and
25 proper operations. Table 1 shows the sequence of work execution.

Table 1

Description of Work	Completion date
Remove columns and Interrupting heads (3 Phases)	24-25 Feb 2013
Transported insulating columns to shop	26 Feb 2013
Performed RTV coating in shop	27-28 Feb 2013
Transported to site to be re-installed	18 Mar 2013
Re-install columns and interrupting heads (3 Phases)	23 Mar 2013
Perform timing testing and proper operation on breaker	4 Apr 2013

Once the insulating columns were removed, temporary covers were installed on the breaker receiver tanks for Holyrood B1L17. The schedule for completing the RTV coating on Holyrood B1L17 was met with some challenges with other priorities taking precedent over the re-installation of Holyrood B1L17. During this time, the other work commitments included:

- The final installation of the Newfoundland Power mobile gas turbine and diesel generator for emergency supply to the Holyrood Thermal Generating Station;
- Emergency hotspot repairs in the Oxen Pond terminal station;
- Provision of a relief operator for Hardwoods gas turbine that was filled by an individual from the Whitbourne electrical crew; and
- Emergency repair of an air valve on Holyrood B13B15 breaker.

All these items resulted in a delay for re-installing the coated RTV breaker insulators. Once the insulating columns were re-installed, the breaker was put back into service after appropriate timing and resistance tests were performed.