

1 Q. **Reference: 2024 Capital Budget Application (Revision 1), Project 9, Replace MDR8000**
2 **Microwave Radios (2024-2025), page i, lines 22 to 24.**

3 There are no viable alternatives to the replacement of these networks due to
4 the general geography of the sites combined with Hydro's technical
5 requirements. As such, Hydro proposes the replacement of these obsolete
6 systems to ensure reliable service is maintained.

7 Has Hydro considered whether satellite communications may be a viable option for replacing its
8 microwave radios? If so, please explain why it is not a viable alternative. If not, why not?

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11 A. Newfoundland and Labrador Hydro ("Hydro") did not consider satellite communications as a
12 viable option in this proposal as it does not meet the technical requirements for Hydro's
13 teleprotection systems. Teleprotection is critical to the operation of the electrical grid, and the
14 existing (and proposed) microwave radio systems owned by Hydro meet Hydro's strict latency
15 performance requirements for teleprotection, while satellite communications systems do not.
16 These performance requirements are based on industry practice.