

1 Q. Is Hydro considering battery storage as an alternative for balancing production variations in
2 wind and solar? What is the current status of battery storage development for such purposes?

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5 A. As stated in the “Reliability and Resource Adequacy Study – 2022 Update,”¹ Newfoundland and
6 Labrador Hydro (“Hydro”) is considering battery storage as a potential resource expansion
7 option. From an expansion point of view, Hydro has considered 100 MW of lithium-ion battery
8 capacity with sufficient energy storage to provide two hours of generation at full capacity. The
9 battery system has round-trip efficiency of more than 85% and can be situated at optimal grid
10 interconnection points to provide a fast response to grid contingency events or to balance
11 renewable generation. Hydro will continue to investigate battery storage options to monitor
12 improvements in lithium-ion technology and to potentially assess new battery technologies.

¹ "Reliability and Resource Adequacy Study - 2022 Update," Newfoundland and Labrador Hydro, October 3, 2022, vol. III, sec. 7.1.