

1 Q. **Reference: Application, 2023 Capital Expenditures Overview, Refurbish Ebbegunbaeg Control**
2 **Structure**

3 a) Could a battery bank provide a reasonable source of backup power for this control
4 structure?

5 b) Would a battery bank have reduced environmental emissions and be more consistent
6 with government zero-carbon initiatives?

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9 A. a) As Newfoundland and Labrador Hydro (“Hydro”) has previously stated,¹ the diesel genset in
10 Ebbegunbaeg serves as an emergency backup in the event the structure’s main power
11 becomes interrupted. When the diesel genset was initially installed in 1967, the generator
12 served as a primary power source for the structure; however, since the commissioning of
13 the structure, a new 25 kV line was connected for main power and the diesel genset was
14 kept in place as an emergency backup. Hydro uses battery banks in various situations, such
15 as for backup station service supply for terminal stations; however, remote sites with critical
16 operations, such as the case for the Ebbegunbaeg location, still have diesel gensets in place
17 due to their reliability and well-established service and maintenance history. Backup power
18 solutions for critical remote sites must be able to operate reliably for extended periods,
19 which is not feasible for a battery storage system supplied by renewable energy sources,
20 such as solar panels, that cannot be relied upon in all weather conditions.

21 b) New diesel gensets are required to meet strict government regulations for emissions. Strict
22 environmental regulations are in place to reduce emissions from diesel gensets. Hydro
23 continues to ensure compliance with these regulations and views its emergency diesel
24 gensets as necessary to support critical operations in order to fulfill its mandate to provide
25 the least-cost, reliable service to its customers.

¹ Please refer to Hydro’s response to CA-NLH-081 of its 2023 Capital Budget Application proceeding.
<<http://pub.nl.ca/applications/NLH2023Capital/responses/CA-NLH-081.PDF>>.