

1 Q. **Reference: Application, Chapter 6, page 6.9**

2 Hydro states “The 2025 study found that the marginal Effective Load Carrying Capability for 50
3 MW of wind is 43% demand, an increase of approximately 20% from the previous 2018 study.”

- 4 a) Identify the wind generators on the IIS including location, number of wind turbines,
5 capacity and annual energy production.
- 6 b) Identify the amount of capacity assumed to be provided by wind generators on the IIS in
7 Hydro’s planning studies.
- 8 c) Did the referenced study assume that the 50 MW of wind generation was spread across
9 the IIS, or located in only one or two areas of the Island? Specifically, how was
10 geographic diversity taken into consideration in the referenced study?
- 11 d) How are the costs of existing wind generation treated in the 2027 Test Year cost of
12 service study?
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15 A. a) Newfoundland and Labrador Hydro (“Hydro”) currently has power purchase agreements
16 (“PPA”) with two 27 MW wind farms on the Island Interconnected System at Fermeuse and
17 St. Lawrence. Each consists of nine 3 MW wind turbines. St. Lawrence is assumed to provide
18 99 GWh annually, and Fermeuse is assumed to provide 96 GWh annually.

19 b) Hydro’s planning studies typically look at long-term requirements for capacity on the Island
20 Interconnected System and the ELCC¹ is used to inform these studies. The PPAs for the
21 existing wind farms end in 2029, so they are not considered in planning studies.

22 c) The referenced study uses generation data based on the two existing wind farms and does
23 not consider geographic diversity. This study is intended to be used for planning purposes,
24 and factors like geographic diversity, capacity factor, and generation profile will change the

¹ Effective Load Carrying Capability (“ELCC”).

1 ELCC curve. The ELCC of any proposed wind generation project will need to be evaluated
2 based on the specific characteristics of that project prior to entering into any future PPA.

3 **d)** In the 2027 Test Year Cost of Service Study, the existing wind generation is allocated 43%
4 demand and 57% energy, as outlined in Section 6.3.1 of Hydro's 2026 General Rate
5 Application.