

1 **Q. Re: Non-Firm Rate Application, page 33**

2 Citation:

3 For preliminary planning purposes, available surplus Recapture Energy may be
4 approximated to be 60 MW over peak. The average available surplus recapture capacity
5 over the past three years is provided in Table 4. This capacity could be used to serve
6 non-firm load in Labrador rather than be exported. As indicated, the ability to support
7 incremental load is restricted by transmission system limitations. Under the current load
8 requirements for the Labrador Interconnected System, even if the available
9 transmission capacity were fully utilized at a 100% capacity factor, surplus Recapture
10 Energy would not be exhausted.

11 **a)** Does the statement that “even if the available transmission capacity were fully utilized
12 at a 100% capacity factor, surplus Recapture Energy would not be exhausted” take into
13 account potential non-firm sales located near Churchill Falls or near the Muskrat Falls
14 Terminal Station, in order to avoid transmission constraints?

15 **b)** Please indicate the total amount of energy that could be used in Labrador, taking into
16 account existing transmission constraints as well as potential consumption at these
17 sites, in relation to the total amount of Recapture Energy available.

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20 **A. a)** The statement does not take into account non-firm service for locations near Churchill Falls
21 or near the Muskrat Falls Terminal Station. The study was completed using existing
22 transmission infrastructure serving Labrador West (Labrador City–Wabush area) and
23 Labrador East (Happy Valley-Goose Bay area) only.

24 **b)** The total amount of energy that could be used in Labrador, based on current transmission
25 constraints,¹ and with 100% load factor is provided in Table 1.

¹ As provided in “Application for a Non-Firm Rate for Labrador,” Newfoundland and Labrador Hydro, September 15, 2022, sch. 1, att. 1, p. 5 of 24, table 2.

Table 1: Maximum Potential Energy Deliveries to Non-Firm Customers (GWh)²

	Winter December to March	Spring April to June	Summer July to September	Fall October to November
Labrador East	81	94	128	56
Labrador West	58	109	110	73
Total	139	203	238	129

- 1 The total amount of energy that can be supplied to potential non-firm customers is limited by
 2 either the transmission system or the amount of surplus Recapture Energy.³

² Table 2 of Schedule 1, Attachment 1 converted from MW to GWh based on the number of hours in the season (e.g., Labrador East Winter is 28 MW, 24 hours per day, 121 days. 28*24*121 = 81.312 GWh).

³ Average Surplus Recapture Energy can be found in "Application for a Non-Firm Rate for Labrador," Newfoundland and Labrador Hydro, September 15, 2022, sch. 1, att. 1, p. 6 of 24, table 3.