

1 Q. Reference: Supply Cost Accounting Application, Evidence page 11 (p. 26 pdf), Table 2

2 Citation:

Table 2: Island Interconnected System Capacity Additions and Retirements

Capacity Addition/Retirement	Capacity Impact (MW)
Muskrat Falls	824
Excess Recapture	<u>72</u>
Total Available on LIL ²⁴	<u>896</u>

3 a. Please clarify if the 824 MW of capacity ascribed to Muskrat Falls is based on the actual
4 generation available on demand, or on the Water Management Agreement. If the former,
5 please explain how this capacity can be guaranteed when flows in the Churchill River are
6 below design flows. If the latter, please justify this claim in light of the Quebec Court of
7 Appeal decision ascribing all capacity from the Churchill Falls Generating Station to Hydro-
8 Québec.

9 b. Please justify the capacity impact of 72 MW ascribed to Excess Recapture. What are the
10 assumptions underlying this value? Are there scenarios that can be envisaged in which this
11 recapture capacity is not available?

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14 A. a. 824 MW is the design capacity of the Muskrat Falls Generating Station but, as is the case
15 with any generating station, this capacity is not expected to be available at all times.
16 However, the plant will be operated in coordination with the Churchill Falls plant to ensure
17 full capacity is available when required to serve the customers of Muskrat Falls. Operating
18 these two plants in a coordinated manner results in more efficient operations and more
19 energy being available at both plants, thereby benefitting their respective customers and
20 shareholders, including Hydro-Quebec. This coordinated operation has no impact on the
21 ability of Hydro-Quebec to access capacity from Churchill Falls; therefore, the Supreme
22 Court ruling referenced is irrelevant. Given these factors, Newfoundland and Labrador

1 Hydro (“Hydro”) is confident that coordinated operation between the plants will continue
2 and that the full capacity of Muskrat Falls will be available if and when required.

3 b. The estimate of 72 MW ascribed to Excess Recapture was estimated based on current
4 requirements for the Labrador Interconnected System. It was meant to be indicative of the
5 ability of Recapture Energy to supplement the capacity available from the Muskrat Falls
6 Generating Station and allow the Labrador-Island Link to transfer closer to its maximum
7 transfer capability of 900 MW, should such transfers be required during periods of high
8 demand on the Island Interconnected System. Using Hydro’s most recent forecast of
9 Labrador Interconnected System demand¹ would yield an excess of 87 MW in 2022,
10 declining to 60 MW in 2025.

11 It is Hydro’s intention to plan for the Newfoundland and Labrador Interconnected System on
12 a provincial basis. Under this premise, as part of its planning processes, Hydro considers all
13 available provincial capacity and forecasts of provincial demand and energy requirements to
14 ensure the latter are met in accordance with Hydro’s obligation to provide reliable service
15 consistent with least cost. There could be a scenario where provincial load growth exceeds
16 available provincial capacity, which would include the capacity associated with Recapture
17 Energy. In such a case, Hydro would identify the least-cost resource option to serve the
18 additional load requirements.

¹ “Reliability and Resource Adequacy Study Review – Near-Term Reliability Report – May 2021,” Newfoundland and Labrador Hydro, May 17, 2021, table 4, p. 17.