

1 Q. **Re: RRAS, 2019 Update, Vol. I, page 10 (36 pdf)**

2 Citation:

3 4.2.1 Probabilistic Capacity Planning Criterion

4 Hydro has proposed that both the Newfoundland and Labrador Interconnected System (region)  
5 and the Island Interconnected System (sub-region) should each have sufficient generating  
6 capacity to satisfy a LOLE target of not more than 0.1. ...

7 Hydro agrees with Liberty's recommendation and has implemented a minimum operational  
8 reserve in its Reliability Model ...Hydro proposes to maintain a minimum reserve of 70 MW  
9 within the island system when the LIL is out of service to provide for acceptable frequency  
10 regulation ...

11 a) Please explain why no probabilistic capacity planning criterion was mentioned for the  
12 Labrador Interconnected System.

13 b) What is Hydro's proposed probabilistic capacity planning criterion for the Labrador  
14 Interconnected System?

15 c) What is Hydro's proposal for a minimum reserve margin for the Labrador Interconnected  
16 System? For Labrador East? For Labrador West?

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19 A. a) Existing supply in Labrador is supplied from Churchill Falls by two sources; the TwinCo<sup>1</sup>Block  
20 and Recapture Energy.<sup>2,3</sup> As requirements supplied under these agreements has priority of

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<sup>1</sup> Twin Falls Power Corporation Limited ("TwinCo").

<sup>2</sup> The power referred to as the TwinCo block of power is a firm 225 MW block of power and energy, capable of supplying 1,971 GWh per year for use in Labrador West.

<sup>3</sup>The Recapture Energy is a source of 300 MW of capacity at a 90 percent monthly load factor available at Point A. The amount of Recapture Energy available at the Churchill Falls bus is different from the 300 MW stated at the border due to the difference in location. The original Hydro-Québec 1969 Power Contract has the delivery point for the 300 MW as "... the point in Labrador on the transmission lines from the CF(L)Co Plant towards the Province of Québec which is at the height of land, about opposite present Mile 148.8 on the Québec North Shore and Labrador Railway, which is the presumed watershed between the St. Lawrence River and the Churchill River."

1           dispatch at the Churchill Falls Generating Station, the capacity and energy made available  
2           under these agreements is considered to be 100% reliable from a generation planning  
3           perspective.<sup>4</sup> Given that the available capacity exceeds what can be delivered in the current  
4           system, there is currently no requirement to complete separate capacity-driven generation  
5           planning activities for the Labrador Interconnected System.

6           b) Please refer to Newfoundland and Labrador Hydro's ("Hydro") response to part a).

7           c) Please refer to Hydro's response to part a). Any operational reserve requirements will be  
8           determined by the Newfoundland and Labrador System Operator as part of its operational  
9           requirements.

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<sup>4</sup> Transmission planning analysis is conducted separately and is subject to existing transmission planning practices.