

1 Q. **Re: Tables 6, 7, 8 and 12**

2 Re-state Tables 6, 7, 8 and 12 to show available capacity at peak without any
3 Recapture.

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6 A. Following clarification on the question posed, Hydro was informed the question was
7 intended to request information about Hydro's capability for upcoming winter
8 seasons if the Labrador-Island Link (LIL) is unavailable.

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10 Hydro considers this scenario to be extremely unlikely. Construction of the LIL is
11 complete, with commissioning ongoing. To date, the LIL has successfully delivered
12 up to 45 MW to the Island Interconnected System (IIS). Hydro expects the LIL to be
13 available for the 2018-2019 winter season.

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15 Further, to ensure that Hydro would be prepared in the unlikely event of the in-
16 service of the LIL being further delayed, Hydro included a sensitivity case in its Near-
17 Term Generation Adequacy Report that considered a one-year delay in LIL in-
18 service, coupled with a 50% deration in capacity.

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20 Finally, the analysis requested assumes that the LIL is out-of-service through winter
21 2021-2022. To date, Hydro has contemplated that in the extreme unlikelihood of a
22 bipole failure, the estimated restoration time of two weeks would result in
23 materially less Expected Unserved Energy than the analysis requested, which
24 assumes no delivery from Labrador to the IIS.

1 Hydro completed the requested analysis and the results can be found in the
 2 following tables. Table 1 provides reserve margin analysis for the Isolated Island
 3 Supply case. Given that in the absence of capacity over the LIL the contracted
 4 supply will not be available to the Island Interconnected System, the re-stated
 5 Tables 7 and 8 yield the same results, provided in Table 2. Table 3 provides a re-
 6 stated Table 12 based on the requested information.

Table 1: Reserve Margin Analysis – Isolated case

Island Interconnected System P90 Demand Forecast Reserve Margin Analysis				
	Winter 2018-2019	Winter 2019-2020	Winter 2020-2021	Winter 2021-2022
Isolated Supply Case				
A: IIS Forecast Peak Demand	1,789	1,789	1,787	1,787
B: Capacity at Peak	1,991	1,991	1,991	1,991
C: Plus available capacity assistance (100 MW)	2,091	2,091	2,091	2,091
Reserve Margin (C-A)	302	302	303	303
Reserve Margin (%)	16.9	16.9	17.0	17.0
Isolated Supply Case with Sensitivity Load Projection I				
A: IIS Forecast Peak Demand	1,814	1,814	1,812	1,812
B: Capacity at Peak	1,991	1,991	1,991	1,991
C: Plus available capacity assistance (100 MW)	2,091	2,091	2,091	2,091
Reserve Margin (C-A)	276	276	278	278
Reserve Margin (%)	15.2	15.2	15.3	15.3

Island Interconnected System P90 Demand Forecast Reserve Margin Analysis				
	Winter 2018-2019	Winter 2019-2020	Winter 2020-2021	Winter 2021-2022
Isolated Supply Case with Sensitivity Load Projection II				
A: IIS Forecast Peak Demand	1,809	1,809	1,807	1,807
B: Capacity at Peak	1,991	1,991	1,991	1,991
C: Plus available capacity assistance (100 MW)	2,091	2,091	2,091	2,091
Reserve Margin (C-A)	281	281	283	283
Reserve Margin (%)	15.5	15.5	15.7	15.7
Isolated Supply Case with Sensitivity Load Projection III				
A: IIS Forecast Peak Demand	1,809	1,804	1,802	1,791
B: Capacity at Peak	1,991	1,991	1,991	1,991
C: Plus available capacity assistance (100 MW)	2,091	2,091	2,091	2,091
Reserve Margin (C-A)	282	286	288	299
Reserve Margin (%)	15.6	15.9	16.0	16.7

Table 2: Isolated Supply Case

Summary of Results P90 Analysis				
Year	2019	2020	2021	2022
HRD DAFOR	Expected Unserved Energy (MWh)			
15%	242	243	233	233
18%	359	360	345	345
20%	453	454	435	435
	Expected Customer Outage Hours			
15%	40,400	40,500	38,800	38,800
18%	59,800	60,000	57,500	57,400
20%	75,500	75,700	72,500	72,500
	Loss of Load Hours (LOLH)			
15%	3.95	3.96	3.80	3.80
18%	5.67	5.70	5.47	5.47
20%	7.04	7.07	6.79	6.79

Table 3: Isolated Supply Case – With Holyrood Derate

Summary of Results P90 Analysis				
Year	2019	2020	2021	2022
HRD DAFOR	Expected Unserved Energy (MWh)			
15%	285	286	274	274
18%	414	415	397	397
20%	516	517	496	496
	Expected Customer Outage Hours			
15%	47,600	74,700	45,700	45,700
18%	68,900	69,100	66,200	66,200
20%	86,000	86,200	82,600	82,600
	Loss of Load Hours (LOLH)			
15%	4.71	4.73	4.53	4.53
18%	6.63	6.66	6.38	6.38
20%	8.13	8.17	7.83	7.83