

- 1 **Q. (Reference Application, 4.1 Mount Carmel Pond Dam Refurbishment, page**
2 **11) It is stated "If a winter season rainfall event allows for recharge of the**
3 **reservoir, an additional 3.49 GWh would be achieved, increasing the available**
4 **capacity assistance to 6.98 GWh to be used during winter on-peak events.**
5 **Using the marginal cost methodology, the value of this storage varies**
6 **between \$770,000 and \$1,920,000 annually over a 10-year period depending**
7 **upon the year and the availability of winter reservoir recharges as described**
8 **above."**
- 9 **a) In what percentage of years is a winter season rainfall event expected to**
10 **occur; e.g., 98%?**
- 11 **b) Does the additional 3.49 GWh of capacity assistance have value to Hydro if**
12 **only available when a winter season rainfall event occurs? More**
13 **specifically, would Hydro include this 3.49 GWh capacity assistance in its**
14 **long-term capacity resource studies?**
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- 16 **A.** a) Winter season rainfall events occur annually and are expected to occur 100% of the
17 time. See the response to Request for Information NLH-NP-024.
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- 19 b) Newfoundland and Labrador Hydro's long-term capacity resource studies are based
20 upon firm capacity installed measured in MW.¹ The proposed project at Mount
21 Carmel Pond will increase winter availability of the Cape Broyle and Horse Chops
22 plants which will potentially increase the firm capacity from the Cape Broyle – Horse
23 Chops hydroelectric development. Since winter season rainfall events occur annually,
24 the additional 3.49 GWh's of capacity assistance will provide value to Newfoundland
25 and Labrador Hydro.

¹ Newfoundland Power's firm capacity provided by hydro generation assets was set at 60.1 MW in Newfoundland and Labrador Hydro's *Reliability and Resource Adequacy Study Review – 2024 Resource Adequacy Plan*.