

- 1 **Q. (Reference NLH-NP-020 and NLH-NP-021) Regarding the marginal energy and**
 2 **capacity costs for 2022 to 2041:**
 3 **a) Does Newfoundland Power agree that the figures show a high variability**
 4 **across a one-year period?**
 5 **b) Does Newfoundland Power believe that the change in marginal cost from non-**
 6 **winter to winter peak within any one year is a result of inflation?**
 7 **c) If Hydro, or any generator, faced such persistently high winter marginal**
 8 **capacity costs, wouldn't those high costs provide an incentive for it to invest in**
 9 **additional generation? How would a significant addition to generating**
 10 **capacity affect marginal capacity cost assuming no corresponding increase in**
 11 **peak demand?**
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- 13 **A.** a) Newfoundland Power observes that marginal energy and capacity costs vary
 14 throughout a calendar year. Marginal energy and capacity costs tend to be higher
 15 in winter periods compared to non-winter periods in a winter peaking region.¹
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- 17 b) No. Differences in marginal costs in a year reflect different marginal costs in
 18 winter periods versus non-winter periods.
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- 20 c) Marginal capacity costs reflect the least-cost source of additional generation
 21 capacity on the Island Interconnected System.² High marginal capacity costs do
 22 not provide an incentive for Hydro, or any other entity, to invest in additional
 23 generation on the Island Interconnected System.³
 24
- 25 High marginal capacity costs provide an incentive to avoid or defer capacity
 26 additions on the Island Interconnected System, where possible. This includes by
 27 continuing to operate low-cost sources of generation such as the Sandy Brook
 28 Plant.⁴

¹ See Newfoundland Power's 2022 *Capital Budget Application, Report 1.2 Sandy Brook Plant Penstock Replacement, Appendix A – Sandy Brook Plant Economic Evaluation*, page A-11.

² Hydro indicates on page 45 of its *Reliability and Resource Adequacy Study – 2019 Update, Volume III Long Term Resource Plan*, November 15, 2019, that an additional turbine in Bay d'Espoir (Unit 8), with a capacity of 154 MW, is being selected by its model as the least-cost option for generation capacity on the Island Interconnected System.

³ Section 14.1 of the *Electrical Power Control Act, 1994* provides Hydro with the exclusive right to supply, distribute and sell electrical power or energy to a retailer or an industrial customer on the island portion of the province of Newfoundland and Labrador. Hydro's exclusive right does not apply to generation facilities used by a retailer or industrial customer exclusively in emergency circumstances.

⁴ Newfoundland Power completed an economic analysis to determine whether continued operation of the Sandy Brook Plant, including penstock replacement, is least-cost for customers. The analysis showed that the value of production from the Sandy Brook Plant is approximately 3 to 4 times the cost of production from the plant. See the 2022 *Capital Budget Application, Report 1.2 Sandy Brook Penstock Replacement, Appendix A – Sandy Brook Plant Economic Evaluation*. See also response to Request for Information NLH-NP-018.

1 A significant addition to generating capacity on the Island Interconnected System
2 would be costly for customers.⁵ A significant addition to generation capacity
3 without a demonstrable need for the additional generation capacity would be
4 inconsistent with the *Electrical Power Control Act, 1994* and would not be
5 justified.⁶

⁵ For example, the estimated capital cost of Bay d'Espoir Unit 8, with a capacity of 154 MW, is \$373 million. See Hydro's *Reliability and Resource Adequacy Study, Volume III: Long-Term Resource Plan*, November 16, 2018, page 43.

⁶ Section 3(b) of the *Electrical Power Control Act, 1994* requires, among other provisions, that all sources and facilities for production, transmission and distribution of power in the province should be managed and operated in a manner that would result in: (i) the most efficient production, transmission and distribution of power; and (ii) power being delivered to consumers in the province at the lowest possible cost consistent with reliable service.