

1 **Q. (Reference Application) What in 2020 was the capital cost per megawatt of**  
2 **Newfoundland Power's hydro capacity? What in 2020 was Newfoundland Power's**  
3 **marginal cost per megawatt hour of hydro energy?**  
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5 A. The estimated capital cost of Newfoundland Power's hydro capacity is approximately  
6 \$80,000 per megawatt.<sup>1</sup>  
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8 The 2020 marginal cost of hydro energy production is approximately zero as there is no  
9 fuel costs and the plants are operated remotely.

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<sup>1</sup> The capital cost of Newfoundland Power's hydro plants was estimated based on an allocation of the total capital cost of hydro plants of \$17.1 million for 2020. The capital cost includes depreciation, return on rate base and income taxes. See response to Request for Information CA-NP-020. Since hydro plants provide both capacity and energy, it is necessary to proportion the capital costs between energy and capacity. Newfoundland Power's cost of service study uses an energy and demand allocator for the purpose of allocating hydro costs to customers. The demand portion is 45.7% of total hydro costs. This results in an estimated capital cost for hydro capacity of \$7.8 million (0.457 X \$17.1 million). With a total hydro unit maximum capacity plant of 97.516 MW, the capital cost of hydro capacity is determined as \$80,000 /MW (7,800,000 ÷ 97.516 = 79,987).