

- 1 **Q. (Reference Application) What in 2021 was the capital cost per megawatt of**
2 **Newfoundland Power’s thermal capacity? What in 2020 [sic] was Newfoundland**
3 **Power’s marginal cost per megawatt hour of thermal energy?**
4
- 5 A. The 2021 forecast capital cost of Newfoundland Power’s thermal capacity is estimated at
6 approximately \$79,000 per megawatt.¹ The 2021 marginal cost of thermal energy
7 production from January to June 2021 was \$408 per megawatt hour.²

¹ The capital cost of Newfoundland Power’s thermal plants is estimated based on a total capital cost of \$3.5 million for 2021. The capital cost includes depreciation, return on rate base and income taxes. Since Newfoundland Power’s thermal plants provide backup service, it is reasonable to assume 100% of the capital costs are related to capacity. With a total thermal plant capacity of 44.5 MW, the capital cost of thermal capacity is determined as \$79,000 /MW ($\$3,500,000 / 44.5 \text{ MW} = 78,652 \text{ \$/MW}$).

² The marginal cost of thermal energy includes the average cost of fuel and labour to operate the thermal plants. From January to June, the fuel cost to operate Newfoundland Power’s thermal plants was \$72,299 and the labour cost to operate the plants was estimated at \$21,559 for a total cost of \$93,858. The average marginal cost of production of \$408 per megawatt hour was determined as the total cost of \$93,858 divided by the production of 230 MWh ($\$93,858 / 230 \text{ MWh} = \408).