

1 Q. Further to response to Request for Information CA-NLH-081:
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3 Please provide the generation and transmission expansion plans that were used to
4 derive the marginal generation and transmission capacity costs.

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7 A. Table 1 provides a summary of the generation and transmission investment costs
8 used to derive Hydro’s marginal generation and transmission capacity costs. The
9 process calculates the starting \$/kW using average expected capital expenditures
10 that are driven by peak loads and expressed in 2017 dollars. This information is
11 used to derive changes in marginal costs over time to reflect increased capacity
12 utilization.

**Table 1 Investment Assumptions for Marginal Generation and
Transmission Capacity Cost**

	Investment Cost (\$000)	2017 Average investment cost
Generation Capacity	105,850 ¹	2,117.0 \$/kW
Transmission Capacity	8,330	1,011.8 \$/kW

13 The derivation of the average investment cost of additional generation capacity is
14 based on the assumed addition of a 50 MW gas turbine in 2030. System generation
15 retirements are also factored into the analysis. Please refer to Table 2.

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17 The derivation of the average investment cost for transmission capacity is based on
18 an average annual change in load of 8.2 MW.

¹ The estimated cost of the 50 MW Gas Turbine is \$87,087,000 in 2015 dollars.

Table 2 Projected Island Generation Capacity Retirements²

	Year	Capacity (MW)
Holyrood Diesels	2022	10
CBPP CoGeneration	2023	8
Hardwoods	2025	50
Stephenville	2028	50

² Table 2 does not include the retirements of wind generation as Hydro does not assume wind generation on the Island is available for meeting capacity requirements.