1 Q. (Reference calculation money reconstruction)

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(Reference Application Schedule B, page 3 of 98) Please provide a detailed calculation of the cost to own and operate NP hydro facilities; i.e., the amount of money recovered annually from NP customers owing to NP hydro generation facilities.

6 A. Table 1 provides a *pro forma* estimate of the total 2020 revenue requirement associated with hydro facility assets for Newfoundland Power.¹

Table 1 2020 Pro Forma Revenue Requirement Analysis Hydro Facility Assets (\$millions)

2020 Pro Forma Revenue Requirement	(64.1)
Purchased Power Expense – Demand ⁷	(5.0)
Purchased Power Expense – Energy ⁶	(79.4)
Income Taxes ⁵	2.2
Return on Rate Base ⁴	9.6
Depreciation Expense ³	5.3
Operating Expense ²	3.2

As shown in Table 1, Newfoundland Power's hydro facilities provide an overall benefit to customers of approximately \$64.1 million on a *pro forma* basis. This includes the cost of owning and operating these facilities at \$20.3 million, minus the reduced purchased power expense of \$84.4 million.

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¹⁰ 11

Current customer rates are based on (i) Newfoundland Power's 2020 test year revenue requirement approved in Order No. P.U. 2 (2019) and (ii) the flow through of Hydro's purchased power costs in Order No. P.U. 31 (2019)

Newfoundland Power forecasts to incur \$3.2 million to operate its hydro facilities in 2020.

Based on the depreciation rates approved by the Board. The depreciation rate associated with generation assets is 2.42%.

Based on Newfoundland Power's 2020 test year return on rate base of 7.04%.

Income taxes associated with return on equity. The income tax rate is 30%.

Newfoundland Power's hydro production reduces the amount of energy that is purchased from Hydro. This reduces the amount of purchased power expense to be recovered from customers through electricity rates. The estimated reduction in purchased power expense related to energy in Table 1 is based on Newfoundland Power production of 436.9 GWh considered in the calculation of 2020 test year purchased power expense and the 2nd block rate charged by Hydro of 18.165 ¢/kWh approved in Order No. P.U. 30 (2019).

Newfoundland Power's hydro production provides a credit to the amount of demand that is billed by Hydro (the "Generation Credit" per page UT-1 of Hydro's *Utility Rate*, Effective July 1, 2020). This reduces the amount of purchased power expense to be recovered from customers through electricity rates. The estimated reduction in purchased power expense related to demand in Table 1 is based on Newfoundland Power's Generation Credit related to its Hydro production of 83,486 kWh x the demand rate charged by Hydro of \$5.00 /kW x 12 billing months, as approved in Order No. P.U. 30 (2019).