

1 Q. **Reference: 2018 Cost of Service Methodology Review Report dated November 15, 2018**

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3 On page 14 (lines 24 to 25) it is stated “*Hydro recommends that all functionalized*
4 *transmission costs be classified as 100% demand related. This is consistent with the*
5 *approach currently used in the cost of service study.*” Please provide the generation
6 capacity/peak demand balance and generation/production energy /energy demand
7 balance for the Avalon Peninsula for the 2019 test year in the 2017 GRA with all thermal
8 and hydro generation on the Peninsula in service and operational for energy production.
9 Please provide these tables showing each source of supply, and with and without the
10 transmission connecting the Avalon Peninsula to the remainder of the Island system.

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13 A. The information as requested is not readily available as Newfoundland and Labrador
14 Hydro’s (“Hydro”) forecast production for the 2019 Test Year as part of its “2017 General
15 Rate Application” filing would have been conducted in accordance with economic dispatch
16 on a system basis. To be responsive, Hydro has developed Tables 1 through 3 to provide an
17 indication of the information requested.

Table 1: Avalon Sources of Supply

	Energy Capability ¹ GWh	2019 Test Year Supply Forecast GWh	Gross Continuous Unit Rating MW
Hydro Avalon Supply			
Holyrood	2,895.2	1,560.3	490.0
Hardwoods	240.9		50.0
Holyrood GT	975.4		123.5
Holyrood Diesels	809.4		10.0
Total Hydro Avalon Supply	4,921.0	1,560.3	673.5
Total NP Avalon Supply²	261.8	261.8	57.2
Purchases Avalon			
Fermeuse	84.4	84.4	-
Total Avalon Purchases	84.4	84.4	-
Total Avalon Supply	5,267.2	1,906.5	730.7

Table 2: Avalon Requirements

	Forecast Test Year Energy Requirements GWh	Forecast Test Year Demand Requirements MW
Newfoundland Power Requirements - Avalon ^{3,4}	3,805.2	874.0
NLH Industrial Customer Requirements - Avalon	708.0	90.0
Total Avalon Customer Requirements	4,513.2	964.0
Estimated Avalon Losses and Station Service ⁵	109.3	55.4
Total Avalon Requirements⁶	4,622.5	1,019.4

Table 3: Demand Balance

	Demand MW
Total Avalon Supply	730.7
Total Avalon Requirements	1,019.4
Demand Balance	(288.7)

¹ Assumes sufficient fuel supply.

² Prepared using the Newfoundland Power Infeed Load Forecast.

³ Prepared using the Newfoundland Power Infeed Load Forecast.

⁴ Includes energy self-supplied by Newfoundland Power (261.8 GWh, 57.2 MW).

⁵ Losses have been estimated based on an allocation of the transmission losses at time of system peak filed in Hydro's 2017 GRA filing and Holyrood station service.

⁶ This energy differs from that included in Hydro's 2019 Test Year, as the test year requirements are based on Newfoundland Power's purchases from Hydro (3,109.1 GWh and 709.8 MW) and does not include energy that Newfoundland Power self-supplies.

1 As indicated in Table 3, in the absence of capacity from sources located off the Avalon
2 Peninsula, in the current system there would be an estimated deficit of 288.7 MW at time
3 of system peak. Hydro notes that if this situation were to occur, the deficit would likely be
4 less as there would be a decrease in the amount of system losses in the case where
5 capacity is supplied by sources located on the Avalon Peninsula.

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7 With respect to the energy balance assuming sufficient fuel supply, there is sufficient
8 energy capability to meet system requirements in all hours in which there is sufficient
9 capacity available on the Avalon Peninsula.