

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 confirm that 100% of all
6 transmission in the Province was constructed to supply increasing demand and that
7 transmission provides no energy benefit to consumers.

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10 A. Newfoundland and Labrador Hydro (“Hydro”) has constructed all transmission lines,
11 regardless of functionalization in cost of service studies, to meet forecast demand
12 consistent with the transmission planning criteria. Transmission lines connecting remotely
13 located generation to the main transmission system (functionalized as generation) are
14 constructed to deliver the total plant peak capacity. Transmission lines connecting
15 industrial customers to the main transmission system (functionalized as transmission and
16 specifically assign to the customer) are constructed to deliver the forecast demand of the
17 customer over the life of the facility. Transmission lines within the main transmission
18 system (functionalized as common transmission) are constructed to meet the system
19 forecast demand with due consideration to the transmission planning criteria.

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21 While transmission additions to the main system are constructed and justified on the basis
22 of reliably meeting forecast demand, there are additional inherent benefits of additional
23 transmission capacity within the main transmission system such as a decrease in
24 transmission system losses, and in the case of additional transmission to the Avalon
25 Peninsula, improved west to east hydraulic generation utilization with subsequent
26 decreased thermal production.

1 The Board of Commissioners of Public Utilities' (the "Board") Proposed Cost of Service
2 Methodology, February 1993,¹ ("1993 Cost of Service Report") states at page 43:

3 It is a fair presumption that Hydro developed hydraulic sites because they
4 offered capacity and energy at least cost, and that where such sites were
5 remote from the transmission system, the cost of transmission between
6 the site and the grid was included in the economic evaluation. Under such
7 circumstances it is the Board's opinion that the transmission from site to
8 grid should be classified in accordance with the generation itself. The
9 response to GCB-11 shows that a number of lines were built for such
10 purposes.

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12 However, growth of the system and expansion of the transmission grid
13 would have resulted in a change of role for many such lines. Where a line
14 was built to access remote generation, but subsequently became a part of
15 the main grid, it is the Board's view that any case for classifying part of the
16 cost to energy would be extinguished.

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18 The first 230 kV transmission line between the Bay d'Espoir Hydroelectric Generating
19 Facility ("Bay d'Espoir") and the east coast as well as the first 230 kV transmission line
20 between Bay d'Espoir and the west coast of the Island were built to connect a major
21 generation source to the Island's load centres. The addition of parallel 230 kV transmission
22 lines and intermediate terminal stations resulted in the formation of a main transmission
23 system or grid. The result has been a change in role for the first 230 kV lines east and west
24 from Bay d'Espoir.

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26 The following transmission lines were constructed by Hydro to connect remotely located
27 generation to the grid:

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- 29 • TL 234 – Upper Salmon Hydroelectric Generating Station to Bay d'Espoir;
 - 30 • TL 243 – Hinds Lake Generating Station to Howley;

¹ "A Referral By Newfoundland and Labrador Hydro for The Proposed Cost of Service Methodology and a Proposed Method for Adjusting its Rate Stabilization Plan to Take Into Account the Variation in Hydro's Rural Revenues Resulting from Variations in the Rates Set by the Board to be Charged by Newfoundland Light & Power Co. Limited to its Customers," Board of Commissioners of Public Utilities, February 1993.

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- 1 • TL 247 and TL 248 – Cat Arm Hydroelectric Generating Station to Massey Drive
2 Terminal Station via Deer Lake Terminal Station;
- 3 • TL 258 – Paradise River Hydroelectric Generating Station to Monkstown Terminal
4 Station; and
- 5 • TL 263 – Granite Canal Hydroelectric Generating Station to Upper Salmon
6 Hydroelectric Generating Station.

7 As provided in Hydro’s response to NP-NLH-009, the addition of TL 269 between Granite
8 Canal Tap and Bottom Brook Terminal Station has resulted in the role of TL 234 and TL 263
9 changing from connection of generation to grid transmission lines. The transmission line TL
10 270 between Granite Canal Hydroelectric Generating Station and Granite Canal Tap
11 remains functionalized as hydraulic generation.

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13 All other lines constructed by Hydro on the Island Interconnected System are required to
14 meet forecast demand.