

1 Q. **Reference: Newfoundland and Labrador Hydro 2018 Cost of Service Methodology Review**
2 **Report, November 15, 2018, Page 7, Lines 6-11.**

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4 *“For Hydro’s transmission assets, the NLSO applied the existing approach of determining if*
5 *any of the high-voltage transmission assets were either functionalized as a generator lead*
6 *or specifically assigned. The addition of TL-269 from Granite Canal to Bottom Brook to*
7 *support the import and export of energy over the Maritime Link requires a change to the*
8 *functionalization of Hydro’s TL-234 and TL-263 from generator leads to common high-*
9 *voltage transmission.”*

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11 Please explain how causality is considered in the decision to reclassify TL-234 and TL-263 as
12 100% demand related.

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15 A. TL 234 was originally built to connect the Upper Salmon Hydroelectric Generating Station
16 (“Upper Salmon”) to the grid at the Bay d’Espoir Hydroelectric Generating Facility (“Bay
17 d’Espoir”). As a result, for cost of service, the 230 kV transmission line was functionalized in
18 accordance with accepted guidelines as hydraulic generation. The addition of TL 263
19 between the Granite Canal Hydroelectric Generating Station (“Granite Canal”) and Upper
20 Salmon was required to connect Granite Canal to the grid at Bay d’Espoir via Upper Salmon
21 and TL 234. As TL 263 and TL 234 connected only radial generation to the grid, both 230 kV
22 transmission lines were functionalized as hydraulic generation for Newfoundland and
23 Labrador Hydro’s (“Hydro”) past cost of service studies. The addition of TL 269 between
24 Granite Canal and the Bottom Brook Terminal Station (“Bottom Brook”) eliminates the
25 radial connection of hydraulic generation to the grid at Bay d’Espoir. The TL 269 addition
26 provides three grid paths between Bay d’Espoir and western Newfoundland including:

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28 1. Bay d’Espoir to Bottom Brook via Stony Brook Terminal Station (“Stony Brook”),
29 Buchans Terminal Station (“Buchans”), and Massey Drive Terminal Station;

1 2. Bay d’Espoir to Bottom Brook via Stony Brook and Buchans; and

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3 3. Bay d’Espoir to Bottom Brook via Upper Salmon and Granite Canal.

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5 The elimination of the radial connection of Granite Canal and Upper Salmon requires the
6 change in the functionalization of TL 234 and TL 263 from hydraulic generation to common
7 transmission. It must be noted that the radial transmission line TL 270 between Granite
8 Canal and Granite Canal Tap is functionalized as hydraulic generation.

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10 Hydro’s changes to the functionalization of TL 234 and TL 263 are consistent with the Board
11 of Commissioners of Public Utilities’ Proposed Cost of Service Methodology, February 1993
12 (“1993 Cost of Service Report”).¹ Page 43 of the 1993 Cost of Service Report states:

13 *It is a fair presumption that Hydro developed hydraulic sites because they*
14 *offered capacity and energy at least cost, and that where such sites were*
15 *remote from the transmission system, the cost of transmission between the*
16 *site and the grid was included in the economic evaluation. Under such*
17 *circumstances it is the Board's opinion that the transmission from site to*
18 *grid should be classified in accordance with the generation itself. The*
19 *response to GCB-11 shows that a number of lines were built for such*
20 *purposes.*

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

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.

1 Further, page 44 of the 1993 Cost of Service Report states:

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3 Recommendation 15:

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5 *That transmission lines and substations in the Island Interconnected System*
6 *used solely or dominantly for the purpose of connecting remotely-located*
7 *generation to the main transmission system be classified in the same*
8 *manner as the generating stations they serve.*

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10 Recommendation 16:

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12 *That all other transmission be classified 100% to demand.*

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14 Given that the addition of TL 269 between Granite Canal and Bottom Brook eliminates the
15 radial connection of remotely-located generation to the main transmission system, it is
16 Hydro's opinion that functionalizing 230 kV transmission lines TL 234, TL 263, and TL 269 as
17 common transmission and classified as 100% demand is the correct approach for cost of
18 service purposes.