

1 Q. **Reference: email from Kimberly Duggan dated August 19, 2022**

2 Citation:

3 During Newfoundland and Labrador Hydro's ("Hydro") presentation of its 2023
4 Capital Budget Application ("CBA") on August 10, 2022, the Labrador
5 Interconnected Group inquired about the specific load request leading to the
6 requirement for additional transformation capacity at the Jean Lake Terminal
7 Station, as proposed in Hydro's 2023 CBA. Hydro noted in its discussion that this
8 increase in load is driven by incremental load growth, including requests for
9 service from Transport Canada for an additional peak load of 550 kW to upgrade
10 the Wabush Airport terminal buildings heating system and an additional peak
11 load of 275 kW to construct a new runway sweeper garage and sand & urea
12 shed, for which the Board of Commissioners of Public Utilities approved an
13 exemption to Regulation 17 of Hydro's Rules and Regulations and approved an
14 Upstream Capacity Charge pursuant to the Network Additions Policy in the
15 amount of \$290,625.00.

16 The Labrador Interconnected Group asked Hydro to reconcile this information
17 with Hydro's response to LAB-NLH-002, filed as a response to an request for
18 information to Hydro's application regarding the Transport Canada requests
19 (Application for Exemption to Regulation 17 and Approval of an Upstream
20 Capacity Charge), in which Hydro stated "There are no additions or
21 modifications required to the transmission system in order to supply this load to
22 Labrador West. It is possible that modifications to the distribution system will be
23 required in order to provide an additional 825 kW to the Wabush Airport. This
24 analysis will be conducted if the exemption application is approved as it would
25 otherwise be unnecessary."Hydro committed to follow up on this apparent
26 discrepancy, and to provide a response to the Labrador Interconnected Group.

27 In Hydro's proposal for Additions for Load - Wabush Substation Upgrades
28 project included in Hydro's 2021 CBA, Hydro provided a load forecast dated May
29 2019, which indicated that the station design would accommodate system
30 growth until 2039-2040, at which time both spare Transformers T4 and T6
31 would require replacement with one larger unit. In 2021, Hydro's Annual
32 Planning Assessment indicated that load growth had accelerated, and that the
33 loss of the largest Transformer, T1, at the Jean Lake Terminal Station would
34 result in the overload of the remaining transformers within the ten-year, long-
35 term planning horizon. To address the accelerated load growth, transformer
36 capacity upgrades would need to be proposed in Hydro's 2023 or 2024 CBA.
37 Transport Canada's load request for 825 kW solidified the need for additional
38 transformation capacity, and Hydro therefore included the Additions for Load
39 Growth - Upgrade Transformer Capacity in its 2023 CBA.

40 Hydro's response to LAB-NLH-002 was provided in the context of the 230 kV
41 transmission assets that interconnect the Labrador West electrical system with
42 the Churchill Fall's Terminal Station, which serves as the source of power for the

1 region, as transfer capacity constraints on the 230 kV system formed the basis
2 for Regulation 17. In its response, Hydro did not reference potential impacts to
3 the 46 kV transmission system. As these are considered transmission assets as
4 defined in Hydro's Network Additions Policy, Hydro's response to LAB-NLH-002
5 was incomplete and should have considered impacts on the 46 kV Transmission
6 system as well as impacts to the 230 kV transmission system, including
7 advancement of previously planned upgrades. Hydro apologizes for this
8 oversight.

9 We trust this response addresses the Labrador Interconnected Groups question.

- 10 a) Please clarify if the charge to Transport Canada under the Network Additions Policy would
11 have been different, had it been acknowledged at the time that the additional peak loads of
12 550kW + 275kW = 825 kW would have resulted in the advancement of the transformer
13 replacements at Jean Lake TS?

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16 A. a) The charge to Transport Canada would have been the same even it had been acknowledged
17 at the time that the additional load contributed to the advancement of the proposed capital
18 work.

19 Under the Network Additions Policy, for applicant demand requests of less than 1,500 kW,
20 the Upstream Capacity Charge is calculated to equal the Upstream Capacity Cost less the
21 Basic Capacity Investment Credit. The Upstream Capacity Cost is computed based on the
22 customer's peak demand multiplied by the approved expansion cost per kilowatt. This was
23 the calculation used to determine the contribution required from Transport Canada.

24 The assessment required under the Network Additions Policy to determine if compliance
25 with a customer's application would require acceleration of the Transmission Expansion
26 Plan is conducted if an applicant's demand request is 1,500 kW or greater. This assessment
27 was not required in dealing with Transport Canada's application for service.