

1 Q. **Reference: Response to CA-NLH-200, parts a and b**

2 Further to the response to CA-NLH-200, parts a and b (Attachments 1 and 2), please explain why
3 the following capital expenditures proposed for inclusion in the Muskrat Falls Sustaining Capital
4 deferral account are necessary:

5 a) the installation of shunt reactors L3101 and L3102 between 2023 and 2026 totalling
6 \$25.2 million

7 b) the forecast installation of downstream public safety boom for \$4.4 million in 2027 and

8 c) the forecast 315 kV right-of-way vegetation clearing and access trail improvements for
9 \$2.2 million in 2027.

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12 A. a) The installation of shunt reactors connected to Transmission Lines L3101 and L3102 at
13 Muskrat Falls Terminal Station 2 will allow for the long-term reliable operation of the
14 Labrador Transmission Assets ("LTA"), the Labrador-Island Link ("LIL") and the Island
15 Interconnected System. The Muskrat Falls generating units provide reactive power support
16 to mitigate abnormal voltage conditions during normal operation and contingency events;
17 therefore, reactive power support is restricted when there are fewer Muskrat Falls
18 generating units operating. The installation of the shunt reactors allows for the operation of
19 the LIL with fewer than two Muskrat Falls generating units in service.

20 b) A 2015 Public Safety Around Dams Review by Hatch Ltd. ("Hatch") identified areas for
21 improvement with respect to public safety measures around the Muskrat Falls Hydroelectric
22 Generating Facility. Several improvements identified by Hatch have since been addressed,
23 including the implementation of an upstream seasonal safety boom. The downstream public
24 safety boom will be a continuation of the phased approach to address the items identified
25 by Hatch in 2015.

1 c) Newfoundland and Labrador Hydro (“Hydro”) operates two 315 kV HVAC¹ transmission lines
2 (TL3101 and TL3102) connecting Muskrat Falls and Churchill Falls over a 245 km corridor as
3 part of the LTA. These lines, commissioned in 2018, are critical for power flow between
4 facilities but currently lack permanent access infrastructure, impeding routine inspection
5 and maintenance. Temporary access trails used during construction were removed due to
6 environmental permit conditions, leaving the Right-of-Way (“ROW”) inaccessible to vehicle
7 traffic. This has hindered vegetation management efforts, which began in 2019, and
8 increased operational costs due to reliance on helicopters and limited ground access.
9 Without proper access, herbicide programs cannot proceed, necessitating more frequent
10 and costly cutting programs. Overgrown vegetation also poses safety risks, including fire
11 hazards and reduced visibility for inspections. To address these issues, Hydro plans to clear
12 approximately 250 hectares of ROW in 2026 and improve trails between structures 104 and
13 164, including upgrades to eighteen stream crossings. The cutting will involve mechanical
14 and manual methods, with strict guidelines for timber handling and environmental
15 protection.

¹ High-Voltage Alternating Current (“HVAC”).