

1 Q. **Reference: Application, Schedule 1: Upgrade Report – Penstock 1 Life Extension – Bay**  
2 **d'Espoir, Appendix M, Page 2 of 219.**

3 The sequence in which the penstocks are to be refurbished assumes all three (3)  
4 penstocks will be refurbished within a three (3) year period and the  
5 refurbishment will be scheduled sequentially such that no more than a single  
6 penstock is out of service at any one time, beginning with Penstock No. 1 and  
7 working from right to left across the three (3) penstocks. This would have  
8 savings in mobilization and demobilization costs in-between penstocks  
9 refurbishments. Having trained and dedicated personnel through all three back-  
10 to-back penstocks refurbishments would maximize productivity and  
11 consistency. Back-to-back refurbishment would see the project complete in  
12 three years which would mitigate risks related to cost increases for material and  
13 labour, when compared to a schedule that could extend out over eight years if  
14 refurbishment is not back-to-back.

15 a) Was Hydro, or its consultant Kleinschmidt, able to quantify the cost savings associated with  
16 completing the three penstocks sequentially as suggested in the reference? If yes, please  
17 provide the details associated with the cost savings. If not, why not?

18 b) What is Hydro's anticipated timeline to complete the refurbishment of penstocks 1, 2 and 3?  
19 Further, when does Hydro anticipate it will be in a position to file applications for penstocks  
20 2 and 3?

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23 A. a) Newfoundland and Labrador Hydro's ("Hydro") consultant estimated that the cost savings  
24 associated with completing the penstocks sequentially would be approximately 3% to 5% of  
25 the project cost, primarily due to reductions in mobilization and demobilization costs. For  
26 additional discussion of cost savings, please refer to Appendix M.<sup>1</sup>

27 b) Hydro is currently carrying the Bay d'Espoir Penstock Life Extension – Phase 2 in its five-year  
28 plan for 2026–2028. The timing of this investment is subject to change. Hydro will continue  
29 to assess the timing, taking into consideration the condition of Penstocks 2 and 3, as well as

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<sup>1</sup> "Application for Approval of Capital Expenditures for Section Replacement and Weld Refurbishment for Bay d'Espoir Hydroelectric Generating Facility Penstock 1," Newfoundland and Labrador Hydro, December 7, 2022, sch. 1, app. M, s. 2.1, p. 9, para. 2.

1 other major capital investment requirements, including potential new generation builds  
2 arising from the *Reliability and Resource Adequacy Study Review* proceeding. Once the  
3 timing is determined, Hydro anticipates that the project would be proposed in the  
4 appropriate capital budget application corresponding to the commencement of the project  
5 (e.g., the 2026 Capital Budget Application).

6 Hydro anticipates proposal of the final phase of the Bay d'Espoir Penstock Life Extension  
7 following the completion of Phase 2.