

1 Q. **Reference: Schedule 1 – Upgrade Report – Penstock 1 Life Extension – Bay d’Espoir.**

2 Appendix M, page 29 of 219, states “LGL has advised that with the current proposed thickness
3 of plate, they normally would not trim this flat/uncurved length.”

4 a) Is Hydro of the opinion that this uncurved piece is a contributor to the peaking problem? If
5 yes, please reconcile why an experienced hydromechanical fabricator, as described by
6 Kleinschmidt on page 28 of 219 in Appendix M, such as Le Groupe Lar would not normally
7 remove the uncurved length while Hydro views the uncurved length as negatively affecting
8 the operation of the penstock.

9 b) What is the estimated dollar cost to trim the uncurved length of the new cans should Hydro
10 decide to do so during the final design stage of the project?

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13 A. a) Newfoundland and Labrador Hydro (“Hydro”) agrees with the opinions of the three
14 independent consultants that the uncurved length from the original construction was a
15 contributor to the peaking problem. Current fabrication methods would have a shorter,
16 uncurved length and a full 180-degree curve resulting in the joining pieces aligning with no
17 peak. It is also intended that design specifications and construction means and methods will
18 have the goal of ensuring no peaking at the joints.

19 b) The additional cost of trimming would be approximately 3% to 5% of the material cost, as
20 referenced in Appendix M.¹ A contingency of \$200,000 was carried in the estimate.

21 The requirement for trimming will be determined during final design.

¹ “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, p. 53, Table 3.1.