

1 Q. **Reference: Schedule 1, Attachment 10, Page 24 of 95.**

2 Replacing the welds from the inside of the penstock only may not fully mitigate
3 the issues in the 17 ft section of penstock and will prove costly while resulting in
4 a repair that does not instill confidence in the longevity of the repair and
5 continued safe operation. This has been highlighted again this year with
6 multiple indications discovered in Penstock 3 in previously repaired welds.
7 Indications found in 5-year-old welds indicates that the weld repairs may have a
8 limited life expectancy.

9 a) How were the indications discovered in Penstock 3's previously repaired welds dealt with?

10 b) Has Hydro experienced indications in any of its repaired Penstock 3 welds that required a
11 third repair?

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14 A. a) Indications discovered in Penstock 3's previously repaired welds were repaired by a
15 qualified third-party welding contractor using an approved welding procedure. Upon
16 completion of the repairs, the welds were subjected to the required non-destructive
17 examination ("NDE") and successfully met acceptance criteria prior to the penstock being
18 returned to service. It is worth noting that the initial weld repairs in 2018 also underwent
19 NDE upon completion at that time and were found to meet acceptance criteria; they then
20 produced indications in later inspections. This suggests that completing weld repairs within
21 the 7/16" steel section does not provide a long-term solution for the continued reliable
22 operation of the penstock.

23 b) Yes; to date, Newfoundland and Labrador Hydro has experienced one weld in the 7/16"
24 steel section requiring a third repair despite the previous repairs being addressed in 2018
25 and 2023 using the same procedure noted in part a) of this response.