

1 Q. **Re: Page 13, lines 14-15**

2 Hydro states that *“the five-year inspection frequency has been re-established for*
3 *steel penstocks.”* When and for what reason was the five year inspection frequency
4 discontinued?

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7 A. The ASCE 79 Steel Penstocks Chapter 17 Section 17.1.2 *Inspection Types and*
8 *Content* standard provides a broad range of frequency for penstock owners to
9 complete inspections. This range is between 5 and 10 years for the comprehensive
10 internal inspections of steel penstocks.

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12 In the short-term, Hydro has a placeholder frequency of 5 years for general
13 planning. However, as was noted in the Near-Term Generation Adequacy Report
14 filing on May 22, 2018, page 13, lines 20-22:

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16 *Inspection frequency and scope currently planned may evolve*
17 *depending on recommendations stemming from the Level 2*
18 *Condition Assessments planned to be completed at Bay d’Espoir this*
19 *year, as well as the findings from the root cause analysis on*
20 *Penstock 1.*

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22 It is currently expected that several penstocks will be inspected before a five-year
23 timeframe has evolved, either from a consultant recommendation or to match the
24 timing with an already required generation unit maintenance outage. In the long-
25 term, and once each individual penstock has been deemed to not require more
26 frequent inspections, Hydro intends to coordinate the penstock inspection
27 frequency to align with the generating unit major overhauls, which has a six-year

1 planned interval frequency. This six-year frequency is near the lower end of the
2 recommended industry standard frequency for inspections of steel penstocks.

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4 The comprehensive inspection frequency for Hydro steel penstocks has varied in
5 the past due to reasons ranging from unit outage constraints, annual work plan
6 demands, and in-service date of the assets. As well, guidelines for establishing
7 inspection frequency have evolved over the years since initial installation. The
8 frequency for the penstock inspection was never formally discontinued, rather the
9 frequency was determined on an as-needed or opportunity basis.