

1 **Q. (Reference 3.1 - Transmission Line 100L Rebuild) Footnote 12 (page 9)**
2 **indicates that approximately \$375,000 has been spent on corrective and**
3 **preventative maintenance of Line 100L since 2019.**

4 **a) With so little required expenditure since 2019 why is it necessary under**
5 **Alternative 1 to spend \$10.9 million (page 11) in 2026.**

6 **b) In Alternative 1, why not replace poles requiring replacement rather than**
7 **building new structures next to them?**
8

9 **A.** a) As outlined in section 4.2 of report *3.1 Transmission Line 100L Rebuild Project*,
10 Alternative 1 would address identified deficiencies on Transmission Line 100L by
11 replacing the existing deteriorated structures identified on the line in a like-for-like
12 fashion in 2026 with the remaining structures and conductor to be replaced five in
13 2031. The expenditure of \$10.9 million identified for this alternative is the estimated
14 cost of replacing all of the deteriorated structures in 2026.
15

16 As discussed further in report 3.1, the large number of deficiencies and overall
17 deteriorated condition of Transmission Line 100L increases its risk failure and must
18 be addressed. Newfoundland Power has demonstrated that Alternative 3, not
19 Alternative 1, is the lowest cost method of addressing the deteriorated condition of
20 Transmission Line 100L on a net present value basis.
21

22 b) H-frame structures consist of poles, cross arms and cross braces. Alternative 1
23 involves the complete replacement of deteriorated H-frame structures as opposed to
24 only replacing the poles of those structures. As stated in section 3.2 of the
25 report 3.1, 251 poles on Transmission Line 100L require replacement along with 118
26 cross arms or cross braces. Replacing only the poles would leave a significant
27 number of deteriorated cross arms and cross braces in service. These structural
28 members are critical to the overall strength and stability of an H-frame structure and
29 their deteriorated condition must also be addressed.
30

31 Additionally, replacing only the poles of a deteriorated H-frame structure introduces
32 a number of costly inefficiencies to the execution of the project. In 2026,
33 Transmission Line 100L will be 62 years old, which is beyond the expected useful
34 service life of the line. Replacing only the pole components on deteriorated H-frame
35 structures will leave the remaining deteriorated structural components in service.
36 With these already deteriorated components being past their expected useful service
37 life, Newfoundland Power anticipates that they will require replacement before 2031.
38 The re-mobilization and re-work required to replace the original components on
39 these structures are costly and would increase the overall cost of the project.