

1 Q. **Reference Application Rev. 1, Volume 2, Wood Pole Line Management Program**

2 How does Hydro's wood pole line management program compare to that used by NP? In
3 Hydro's opinion should a consistent approach to wood pole line management be used across
4 the Province?

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7 A. Based on information learned through the 2020 capital budget process, Newfoundland and
8 Labrador Hydro ("Hydro") believes the following are the key areas of difference between Hydro
9 and Newfoundland Power with respect to the management of transmission wood pole assets:

- 10 • Hydro's program employs a ten-year inspection cycle, following reliability-centred
11 maintenance principles. The first inspection is performed on a line that has been in service
12 for 20 years. Newfoundland Power performs ground inspections only and on every line at
13 least once per year.
- 14 • Hydro performs full climbing inspections of all poles under its program. Newfoundland
15 Power performs climbing inspections when concerns with specific components are
16 identified through ground inspections.
- 17 • During inspections, Hydro treats its transmission poles to replenish preservative levels in an
18 effort to proactively prevent decay. Newfoundland Power does not do this.
- 19 • Hydro's inspections involve sounding tests on every pole under its program. Newfoundland
20 Power performs sounding tests at random on poles in service 35 years or less and on all
21 poles in service more than 35 years.
- 22 • Hydro collects a core sample from every tenth pole inspected and has these samples tested
23 for preservative retention. Hydro also collects core samples to assist in pole evaluation
24 when a problem is indicated during inspections. Newfoundland Power collects core samples
25 when a problem is indicated on specific poles during inspections.

- 1 • Hydro’s program uses condition-based assessment data to evaluate residual strength
2 remaining in the existing assets through engineering analysis based on site specific factors.
3 (i.e., a pole may appear to be deteriorated but depending on the classification and the site
4 specific line design factors e.g., short span, etc.), the component may be acceptable for the
5 intended application without replacement).

6 Hydro believes that it is best practice to manage wood pole assets through well developed
7 programs built around analysis of inspection data using survival curve or asset health index
8 methodology; such programs minimize costs while maintaining reliability. Hydro’s Wood Pole
9 Line Management Program is an example of such an approach.