

1 **Q.** Reference: "2027 Capital Budget Application," Newfoundland Power Inc., May
2 29, 2026, 2027–2031 Capital Plan, pp. 7-9; Schedule B, Reconstruction, pp.
3 41-42 and Rebuild Distribution Lines, pp. 50-51; and response to Request for
4 Information CA-NP-046, pp. 1-2.

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6 Newfoundland Power states that industry experience indicates an average
7 expected useful service life of 54 years for distribution wooden support
8 structures, that approximately 16% of its distribution wooden support
9 structures have exceeded 54 years in service, and that a further 19% will
10 reach 54 years in service over the next decade. Newfoundland Power also
11 states that the risk of distribution equipment failure is currently high due in
12 part to the age of its electrical system. In CA-NP-046, Newfoundland Power
13 states that survivor curves from its 2019 Depreciation Study are used for
14 financial purposes and are not used as formal asset-class-specific models of
15 failure probability.

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17 a) Please identify the survivor curve and average service life currently
18 used for Newfoundland Power's distribution wooden support
19 structures for depreciation purposes, including the Iowa curve
20 designation, if applicable, and explain the relationship between that
21 curve and the 54-year average expected useful service life cited in the
22 2027–2031 Capital Plan.
- 23 b) Please confirm that an average service life of 54 years does not
24 represent an age at which an individual distribution wooden support
25 structure is presumed to have reached end of life or to require
26 replacement. If not confirmed, please explain.
- 27 c) Given that approximately 16% of Newfoundland Power's distribution
28 wooden support structures have exceeded 54 years in service, please
29 explain the basis for Newfoundland Power's statement that the
30 distribution system is exposed to a high risk of equipment failure due
31 in part to asset age. In the response, please distinguish between risk
32 attributable to the age profile of the pole population and risk supported
33 by inspection or condition information.
- 34 d) Please provide the percentage of distribution wooden support
35 structures expected to remain in service beyond 54 years under the
36 applicable survivor curve and explain whether Newfoundland Power
37 has compared the actual age and retirement experience of its
38 distribution wooden support structures with that survivor curve. If
39 such a comparison has been completed, please provide it. If not, please
40 explain why not.

41
42 **A.** a) The 2019 Depreciation Study provides two subaccounts associated with wood
43 distribution poles and fixtures. These include Wood – Under 35 ft and Wood – 35
44 ft and Over. The estimated Iowa survivor curve for wood poles is 56-R1.5.¹

¹ See the 2019 Depreciation Study, page VI-7.

1 The estimated service life of 56 years from the 2019 Depreciation Study is based
2 on an analysis of the experience with Newfoundland Power's assets, including
3 actual retirements, and is completed by Gannett Fleming approximately every
4 five years.² The average expected useful service life of 54 years quoted in the
5 *2027-2031 Capital Plan* is based on an industry average derived from information
6 filed with the Federal Regulatory Commission ("FERC").³

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8 The comparability of these figures demonstrates the reasonableness of the
9 average expected useful service life of 54 years quoted in the *2027-2031 Capital*
10 *Plan*.⁴

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12 b) It is confirmed. As stated on page 7 of the Company's *2027-2031 Capital Plan*,
13 while age is not the primary determinant as to whether an asset requires
14 refurbishment or replacement, it provides a reasonable indication of the
15 probability that an asset may fail. Replacement or refurbishment decisions
16 continue to be driven by the most recent condition and inspection information as
17 part of the Company's annual capital planning process. See the response to
18 Request for Information PUB-NP-022 for additional information.

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20 c) Newfoundland Power's statement that, due in part to age, the risk of equipment
21 failure on the distribution system is high is not solely based on the age profile of
22 the Company's wooden support structures. The assessment of risk to the
23 distribution system also includes the age profile of distribution overhead
24 conductor, approximately one quarter of which has currently exceeded the
25 average industry expected useful service life of 50 years.⁵

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27 The risk associated with the age of the electrical system is not unique to
28 Newfoundland Power. For example, in the Province of Ontario, the Mowat
29 Centre's Report on the Ontario Energy Sector notes an average of \$15 billion a
30 year will need to be invested over the next two decades just to maintain current
31 service levels.⁶ In addition, Hydro acknowledged a key area of strategic focus is
32 balancing the management of its aging infrastructure with its mandate. Hydro
33 states the majority of its installed assets are more than 40-50 years old, and, as

² As part of the completion of a depreciation study, Gannett Fleming conducts site visits of selected assets, interviews with asset managers, and incorporates its experience completing depreciation studies globally to estimate survivor curves.

³ See the *2027 Capital Budget Application, 2027-2031 Capital Plan*, section 2.4 Asset Condition Outlook, footnote 23.

⁴ In addition, the 2014 Depreciation Study estimated the service life of distribution poles to be 53 years. See the *2014 Depreciation Study*, page VI-8.

⁵ See the *2027 Capital Budget Application, 2027-2031 Capital Plan*, section 2.4 Asset Condition Outlook, page 9. The overall assessment of the risk of equipment failure is based on the most recent age profile of the Company's assets and does not incorporate risk attributable to condition or inspection information. See part b) for further information.

⁶ See *Mowat Centre, Background Report on the Ontario Energy Sector (December 2016)*.

1 a result, Hydro's capital investment strategy aims largely to sustain current
2 system-level reliability by undertaking renewal-driven capital investment.⁷
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- 4 d) The 2019 Depreciation Study provides that approximately 56.59% of wood poles
5 and overhead conductor (bare copper) would be surviving at 54.5 years.⁸ As
6 discussed in part a), survivor curves are estimated based on an analysis of the
7 experience with Newfoundland Power's assets, including actual retirements.

⁷ See Hydro's *2027 Capital Budget Application, Volume 1 - 2027 Capital Budget Overview*, page 1, lines 7-12.

⁸ See the *2019 Depreciation Study*, Appendix A, page A-86. The calculation of the percentage of assets surviving includes both distribution wood poles and bare copper overhead conductor as provided by Gannett Fleming.