

1 **Q. (Reference Application Schedule B, pages 45, 46 and 47 of 98) Please quantify the**
 2 **risk to customers if the Rebuild Distribution Lines (Pooled) project is deferred by**
 3 **two years in terms of probability of failure and the consequences of failure.**
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5 A. The *Rebuild Distribution Lines* project is part of the Company's preventative
 6 maintenance program and cannot be deferred for two years.¹
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8 Newfoundland Power's preventative maintenance program for its distribution lines
 9 involves following its *Distribution Inspection and Maintenance Practices* every year.² It
 10 has been found that these inspection and maintenance practices are good utility practice.³
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12 Inspections for the 43 distribution lines on which work is to take place in 2021 are
 13 ongoing through 2020. If the work to be completed in the 2021 *Rebuild Distribution*
 14 *Lines* project is deferred until 2023, then these inspections would have to be completed
 15 again in 2022. Likewise, if there is no 2022 *Rebuild Distribution Lines* project,
 16 inspections would still have to take place in 2021 as part of the 2021 *Reconstruction*
 17 project.⁴ Therefore, the 2-year deferral of the 2021 *Rebuild Distribution Lines* capital
 18 project would effectively result in duplicating work and creating backlogs of work that
 19 may not get completed in a timely matter.⁵
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21 Approval of the 2021 *Rebuild Distribution Lines* project allows Newfoundland Power to
 22 continue to carry out its preventative maintenance program. The deferral of the *Rebuild*
 23 *Distribution Lines* project would result in the suspension of the Company's preventative
 24 maintenance program and planned maintenance activities. Unplanned maintenance is
 25 more costly than planned maintenance.⁶
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27 Newfoundland Power has not undertaken the risk analysis requested incorporating the
 28 probability of failure and the consequences of failure. Newfoundland Power observes
 29 that not replacing deteriorated distribution structures and electrical equipment that were

¹ For a detailed description of the *Rebuild Distribution Lines* project, see the response to Request for Information CA-NP-049.

² A survey of 23 utilities conducted in 2014 for the Canadian Electricity Association on distribution line inspection practices found that all utilities responding inspected their distribution feeders. The average inspection cycle was 5 years in a range of 1 year to 12 years. The report titled CEATI Report No. T134700-50/119 Distribution Inspection & Maintenance Cycle Comparison of Utility Practices can be purchased from CEATI International Inc.

³ See section 7.2.3 of the Board's *Phase One Report, September 29, 2016*, in the Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnected System.

⁴ The relationship between the *Rebuild Distribution Lines* project and the *Reconstruction* project and how they work together in the Company's preventative maintenance program for distribution lines is explained in the responses to Requests for Information CA-NP-042, CA-NP-043 and CA-NP-049.

⁵ Newfoundland Power observes that the number of deficiencies to be completed as a result of the inspection program would remain the same whether addressed under the current plan, or if the work is deferred for 2 years as suggested.

⁶ Planned work can be organized such that multiple deficiencies can be addressed in the same site visit, maximizing the efficiency of the work. Unplanned work often occurs after normal work hours, involving overtime, customer outages and poor weather conditions. Frequently, a follow up visit to address deficiencies other than the one that caused the outage is required. This approach is less efficient and more costly.

1 identified through the ongoing inspection program would increase the probability of
2 failure.⁷ The consequence of failure would also increase, especially if safety-related
3 deficiencies were neglected.

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5 Deferring the *Rebuild Distribution Lines* project for 2 years would not be consistent with
6 good utility practice.⁸ Doing so would have cost, reliability and safety consequences.

⁷ Deficiencies to be addressed in the *Rebuild Distribution Lines* project are those deemed to present risk of failure before the next scheduled inspection in 7 years.

⁸ See the response to Request for Information CA-NP-043 for an explanation of how Newfoundland Power's current reliability management processes are good utility practice.