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Q. Reference: 2024 Capital Budget Application – Intervenor Evidence, Utility Management Responsibility Report, Midgard Consulting Incorporated, page 41.

"Utilities typically quantify the risk of leaving an asset in service against the assumed alternative of fully replacing the asset and often ignore lower cost partial risk mitigation alternatives."

Please provide practical examples from either Nova Scotia, Ontario, Manitoba or British Columbia where utilities have ignored lower cost partial risk mitigation alternatives in favour of fully replacing an asset.

A. In Ontario, Hydro One proposed to spend \$553.9 million on conductors over the 2020-2022 Test Period. Complete conductor replacement was a more expensive full replacement approach that did not adequately consider lower-cost partial risk mitigation alternatives such as conductor splice replacements. The OEB raised concerns about this approach:

"OEB staff submitted that Hydro One has not demonstrated a correlation between its conductor condition assessment testing and its historical conductor performance deterioration. From a cost and benefit point of view, Hydro One has not demonstrated that the planned conductor replacements will meaningfully improve system reliability. In addition, no evidence was provided showing that proposed expenditures on conductor replacements are cost effective on a dollar spent per avoided customer interruption basis, relative to other investments." ¹

In Manitoba, Manitoba Hydro categorizes its capital expenditures into two main groups: Major New Generation projects and Business Operations Capital. Business Operations Capital projects cover expenses necessary to maintain and sustain electricity and natural gas services, including complete replacement of aging assets. The MPUB believed that Manitoba Hydro should cut costs in Business Operations Capital, as it was skeptical about the necessity of all planned investments needed to ensure safe and reliable system operation during the Test Period based on complete asset replacements as the primary asset management strategy:

 "The Board does not accept the Business Operations Capital spending forecast in Capital Expenditure Forecast CEF16. The Board does not accept that all Test Year investments are condition-driven and reasonably required for the safe and reliable operation of the system. The Board finds that Business Operations Capital spending can be safely decreased by \$160 million, based on Manitoba Hydro's evidence that it can defer \$160 million of spending in the Test Year. This is

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¹ HONI, EB-2019-0082, 2020-22 Electricity Transmission Revenue Requirement, Decision and Order, p. 71. Link.

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consistent with the Board's findings in Order 73/15 that Manitoba Hydro has not adequately evaluated the long-term pacing and prioritization requirements for Business Operations Capital spending." ²

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² Manitoba Hydro, 2017/18 & 2018/19 General Rate Application, PUB Order No. 59/18, Section 6.3, p. 110. Link.