- Q. (Reference Application, 2023 Capital Budget Overview, Appendix C, page 1, Footnote 2) Please provide details of methods (ii) and (iv) referenced in the footnote.
- A. The methods for prioritizing capital expenditures, as referenced in this Request for Information, are:
  - (ii) Weighted Formulas: This methodology involves establishing specific criteria to score risks related to capital expenditures. The criteria generally reflect corporate goals or objectives with each criterion assigned a weight in a formula (typically a percentage). Projects are evaluated by scoring a project against all criteria. The overall priority of an expenditure is determined by adding the scores together for all criteria based on their weights in the formula.

For example, London Hydro applies a weighted formula for infrastructure-related expenditures. The formula relies on: (i) a Weighted Blended Health Index that is calculated using the Average Health Index for the relevant asset categories; and (ii) risk scores of one to 10 that are assigned across five weighted criteria, which include reliability, safety, environment, capacity and efficiency.

London Hydro's formula is as follows:

$$Ranking = \sum \frac{(Risk\ Score)*(Weighting\ Contribution)}{Weighted\ Blended\ Health\ Index}$$

(iv) Advanced Software: This methodology involves prioritizing capital expenditures using advanced software, such as the Copperleaf Portfolio software. The Copperleaf Portfolio supports a risk-based approach to capital planning and budgeting. The software captures future spending requirements, investment opportunities, and known investment and project requirements. The value metrics used to quantify the risk mitigated by a project, or the direct financial costs and benefits of a project, can be guided by a questionnaire in order to quantify risks and benefits.

For example, FortisBC implemented Copperleaf software in 2019 and is in the process of compiling the necessary asset data to fully utilize the software in prioritizing capital expenditures.